

Olink® Target 受託サービス

1 μ L ~

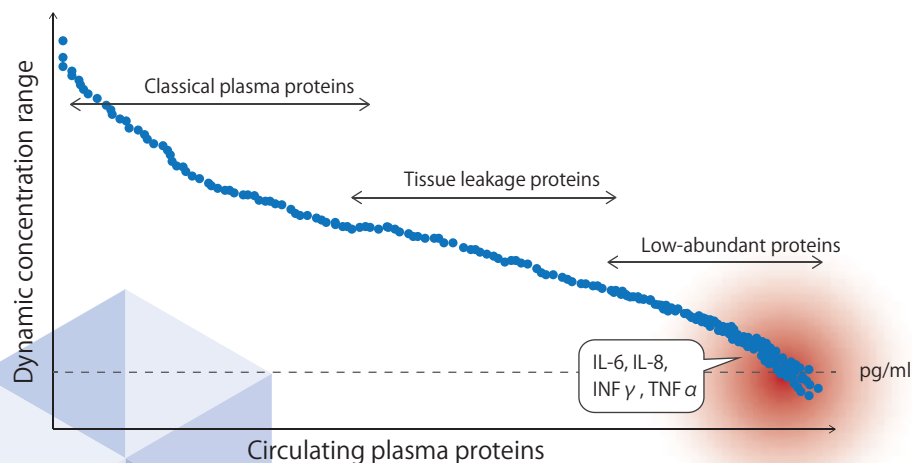
Olink® Target を用いた 血清・血漿 タンパク質相対定量解析

質量分析で到達できない領域へアプローチ。

微量のリキッドバイオプシーサンプルから Low-abundant protein を定量。

Proximity Extension Assay, PEA 法は、ターゲットのタンパク質に対し、2つの DNA タグ付き抗体でイムノアッセイを行い、得られた 2 本鎖 DNA からリアルタイム PCR や次世代シーケンサーで発現定量を行う革新的な技術です。ターゲットタンパク質に特異的な 2 つの抗体が正しく結合した場合のみ、2 本鎖 DNA が形成されるため、極めて特異性の高いアッセイ技術であり、マルチプレックス反応における抗原と抗体の交差反応性の問題を克服しています。

質量分析を用いたプロテオーム解析の場合、特に血清・血漿のように複雑性が高くて含まれるタンパク質の濃度差が大きい検体では、多量タンパク質によって微量タンパク質の検出や定量が妨げられる事も多く、例えば、サイトカイン類に代表されるような微量タンパク質は、バイオマーカー探索や疾患研究において大変重要であるにもかかわらず、検出できないケースが多くあります。今回、新たに受託サービスをスタートいたします、Olink proteomics 社のプラットフォーム（PEA 法）では、このような極微量に含まれるタンパク質も精度よく比較定量する事ができ、質量分析を用いた方法では到達できなかった領域へのアプローチが期待できます。



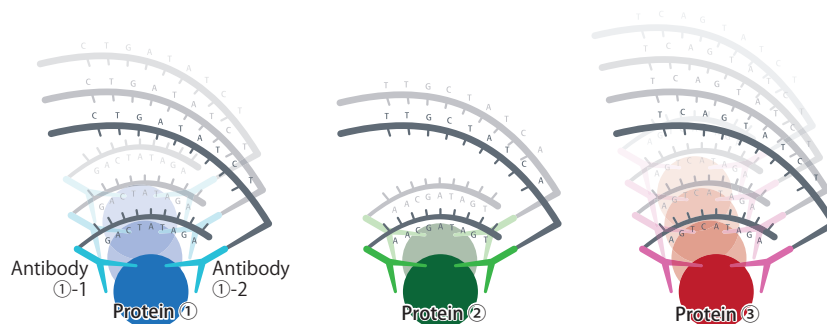
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Olink® PEA テクノロジーの特徴 — Proximity Extension Assay—

1つのタンパク質に対し、2つのDNAタグ付き抗体でイムノアッセイを行い、得られた2本鎖DNAからリアルタイムPCRや次世代シーケンサーで発現定量を行う技術です。ターゲットタンパク質に特異的な2つの抗体が正しく結合した場合のみ、2本鎖DNAが形成されるため、極めて特異性の高いアッセイ技術であり、マルチプレックス反応における抗原と抗体の交差反応性の問題を克服しています。

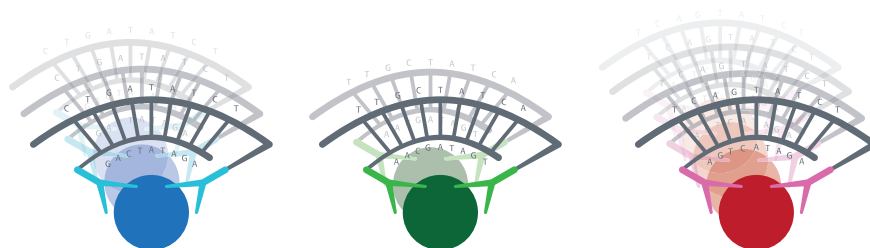
Immuno reaction

ターゲットタンパク質につき、2種類の抗体が選定され、相補的な配列のDNAオリゴヌクレオチドで標識されています。これらのオリゴ標識抗体が、溶液中にてターゲットタンパク質に結合します。



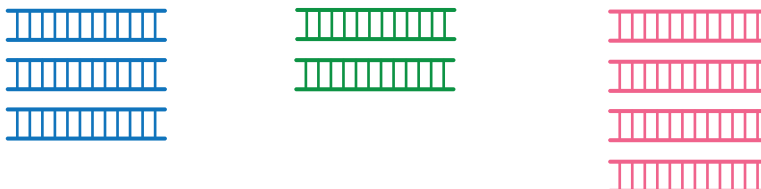
Extension reaction

2つの抗体が近接すると、それらに結合している相補的なDNAオリゴヌクレオチドがハイブリダイズします。



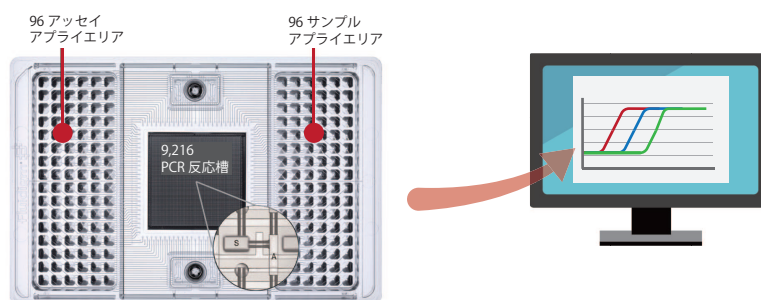
Amplification

それぞれのターゲットタンパク質に特有の配列である2本鎖DNAが、初期濃度に比例して生成されます。



Detection by qPCR

microfluidic qPCRによって、定量化されます。

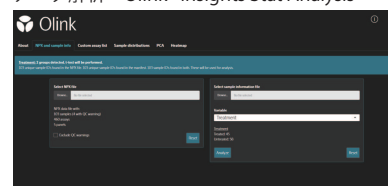


Data generation and QC

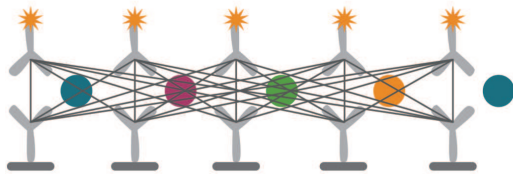
専用の解析ソフトウェアにデータをインポートし、データ品質の検証、データノーマライズを行います。また、Olink® Insights Stat Analysisで統計解析を実施できます。



データ解析 Olink® Insights Stat Analysis

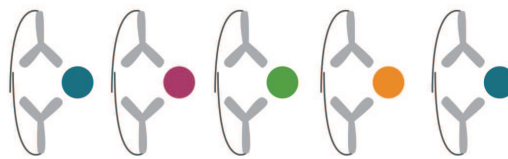


□ マルチプレックス抗体反応における“交差反応性”の問題を解決



マルチプレックス ELISA

交差反応により生じた非特異的産物もシグナルとして検出され、濃度が過剰・過少評価される場合がある。



PEA 法

交差反応により生じた非特異的産物では、二本鎖 DNA が形成されないため、リアルタイム PCR シグナルとして検出されない。そのため、より多くのマルチプレックス反応を、精度よく行う事が可能。

□ 微量サンプルからでも数多くのタンパク質を測定可能

マイクロフリューイドクス技術により、1 パネル（Target 96 の場合、92 タンパク質の測定）に必要な血漿はたった 1 μ L。

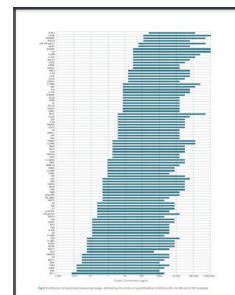
複数パネルを活用すれば、より多くのタンパク質をカバーできます。

Target 96 で最大 1,161 タンパク質をカバー（13 パネル使用時。サンプル量はわずか 13 μ L）

□ 透明性のあるバリデーションデータ

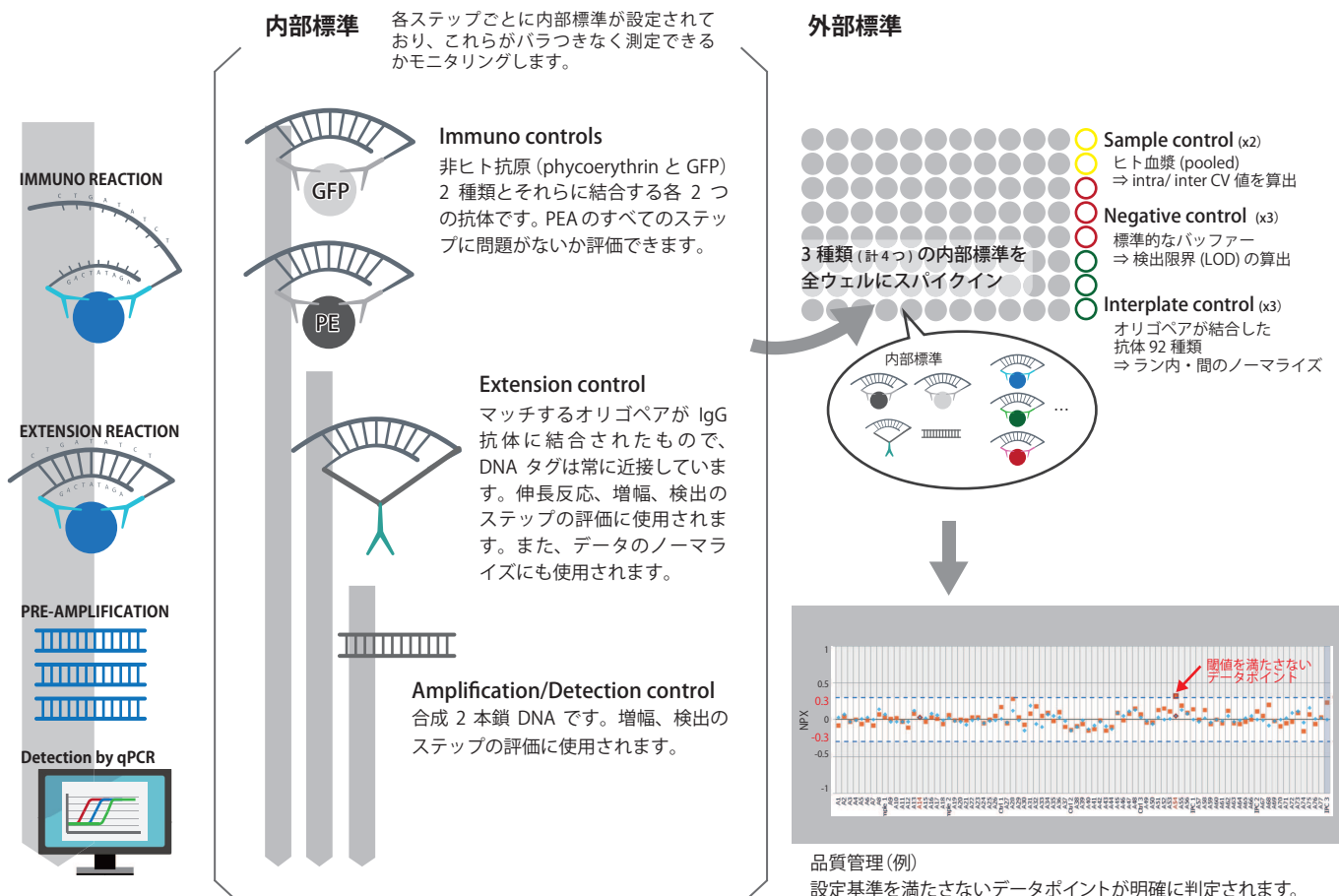
アッセイ開発時におけるバリデーション結果が公開されています。

- 感度 検出限界（LOD）、定量幅（LLOQ、ULOQ）、Hook 効果点の算出
- 特異性 交差反応性の確認
- 再現性 同時再現性（Intra CV）および日差再現性（Inter CV）の算出
- スケーラビリティ マルチプレックス数を変化させた時の相関試験
- ダイナミックレンジ 組換えタンパク質を用いた定量幅の算出



□ 厳密なデータ品質管理

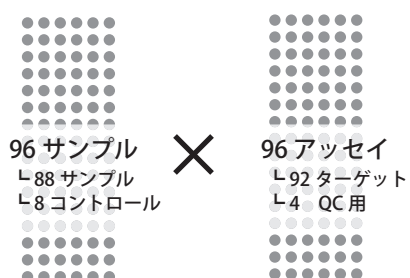
Olink Proximity Extension Assay (PEA) は、複数のコントロールを使用し、全工程によって問題が生じていない事が厳密にチェックされます。



Olink Target 96 受託サービス

- 相対定量値 (Normalized Protein Expression, NPX)
- 1つのパネルにつき、96のアッセイが実施されます。
 - ↳ 92種のターゲットアッセイと、4種のコントロールアッセイから構成。
- 1つのパネルにつき、最大 88 サンプルの測定が可能。
- 血清・血漿・脳脊髄液、唾液など幅広いサンプル種に対応。
- 必要なサンプル量は 血漿の場合 1μL
- パネルは全 15 種類 (ヒト 14 種類、マウス 1 種類) <<下記参照>>

血清・血漿、脳脊髄液、唾液、尿
組織・細胞ライセート液、培養上清 等



88 検体を同時測定し、
92 の対象タンパク質についての『相対定量値』算出。

Olink Target 96 panel の種類

ヒト用 14 種類 / マウス用 1 種類

↳ 疾患領域ごとに構成されたパネル (7 種類)

Inflammation
Cardiovascular 2 種類
Oncology 2 種類
Neurology
Immuno-oncology

↳ 生物学的プロセスごとに構成されたパネル

Cardiometabolism
Cell regulation
Neuro-exploratory
Immune response
Development
Metabolism
Organ damage

各パネルのアッセイ対象タンパク質詳細は次ページから

仕 様

▶ 必要サンプル量

血清・血漿の場合、20μL 以上をご提供ください。
その他の検体 (脳脊髄液、唾液、尿、細胞ライセート液等)
の場合は、ご相談ください。

▶ 納期

分析サンプルをお受け取りした日から1.5~2ヶ月程度
(使用するパネルによって異なりますので、お問い合わせください)

▶ サービス内容

- ・ サンプル前処理
 - ↳ 96ウェルフォーマットへの分注作業
 - ↳ サンプル ランダム化
- ・ Olink Target 96 分析
- ・ 専用ソフトウェアでの一次解析

▶ 納品物

- ・ 報告書
- ・ データ (エクセルファイル形式)

▶ 価格

基本料金 ¥ 500,000 (税別) / パネル
分析単価 ¥ 20,000 (税別) / 検体

例) 2群 × 各 n=30 の場合

¥ 500,000 + ¥ 20,000 × 60 = ¥ 1,700,000

- ・ 多検体の場合、割引適応あり
- ・ 弊社 (国内拠点) での分析のため、サンプル輸送費は~2,000円程度です。
一般の宅配【冷凍便・ドライアイス梱包】でお送りください。
- ・ 分析遂行の最小検体数は44検体以上とさせて頂いております。
44検体以上未済でご依頼の場合には、別のユーザー様案件とのパネルシェアをお待ち
頂く、または、44検体分の費用をご負担いただく事をお願いいたします。

★ 詳しくはお問合せください！

◆ Inflammation

「炎症」は生物医学研究にとって中心的な重要性を持つ生物学的プロセスであり、「古典的な」炎症状態（IBD や皮膚疾患など）から心血管疾患や癌まで幅広い疾患の要因であると考えられています。このパネルは、関節リウマチ、クローン病、潰瘍性大腸炎、神経炎症、呼吸器疾患などのさまざまな疾患領域で、炎症関連バイオマーカーとされるタンパク質が分析対象となります。

Olink Target 96 inflammation

Target	Uniprot No.
Adenosine Deaminase (ADA)	P00813
Artemin (ARTN)	Q5T4W7
Axin-1 (AXIN1)	O15169
Beta-nerve growth factor (Beta-NGF)	P01138
Caspase 8 (CASP-8)	Q14790
C-C motif chemokine 4 (CCL4)	P13236
C-C motif chemokine 19 (CCL19)	Q99731
C-C motif chemokine 20 (CCL20)	P78556
C-C motif chemokine 23 (CCL23)	P55773
C-C motif chemokine 25 (CCL25)	O15444
C-C motif chemokine 28 (CCL28)	Q9NRJ3
CD40L receptor (CD40)	P25942
T-cell surface glycoprotein CD8 alpha chain (CD8A)	P01732
CUB domain-containing protein 1 (CDCP1)	Q9H5V8
C-X-C motif chemokine 1 (CXCL1)	P09341
C-X-C motif chemokine 5 (CXCL5)	P42830
C-X-C motif chemokine 6 (CXCL6)	R80162
C-X-C motif chemokine 9 (CXCL9)	Q07325
C-X-C motif chemokine 10 (CXCL10)	P02778
C-X-C motif chemokine 11 (CXCL11)	O14625
Cystatin D (CST5)	P28325
Delta and Notch-like epidermal growth factor related receptor (DNER)	Q8NFT8
Eotaxin-1 (CCL11)	P51671
Eukaryotic translation initiation factor 4E-binding protein 1 (4EBP1)	Q13541
Fibroblast growth factor 5 (FGF-5)	P12034
Fibroblast growth factor 19 (FGF-19)	Q95750
Fibroblast growth factor 21 (FGF-21)	Q9NSA1
Fibroblast growth factor 23 (FGF-23)	Q9GZV9
Fms-related tyrosine kinase 3 ligand (Flt3L)	P49771
Fractalkine (CX3CL1)	P78423
Glial cell line-derived neutrophilic factor (hGDNF)	P39905
Hepatocyte growth factor (HGF)	P14210
Interferon gamma (IFN-gamma)	P01579
Interleukin-1 alpha (IL-1 alpha)	P01583
Interleukin-2 (IL-2)	P60568
Interleukin-2 receptor subunit beta (IL-2RB)	P14784
Interleukin-4 (IL-4)	P05112
Interleukin-5 (IL-5)	P05113
Interleukin-6 (IL-6)	P05231
Interleukin-7 (IL-7)	P13232
Interleukin-8 (IL-8)	P10145
Interleukin-10 (IL-10)	P22301
Interleukin-10 receptor subunit alpha (IL-10RA)	Q13651
Interleukin-10 receptor subunit beta (IL10RB)	Q08334
Interleukin-12 subunit beta (IL-12B)	P29460
Interleukin-13 (IL-13)	P35225

Target	Uniprot No.
Interleukin-15 receptor subunit alpha (IL-15RA)	Q13261
Interleukin-17A (IL-17A)	Q16552
Interleukin-17C (IL-17C)	Q9P0M4
Interleukin-18 (IL-18)	Q14116
Interleukin-18 receptor 1 (IL-18R1)	Q13478
Interleukin-20 (IL-20)	Q9NYY1
Interleukin-20 receptor subunit alpha (IL-2oRA)	Q9UHF4
Interleukin-22 receptor subunit alpha-1 (IL-22RA1)	Q8N6P7
Interleukin-24 (IL-24)	Q13007
Interleukin-33 (IL-33)	Q95760
Latency-associated peptide transforming growth factor beta 1 (LAP TGF-beta-1)	P01137
Leukemia inhibitory factor (LIF)	P15018
Leukemia inhibitory factor receptor (LIF-R)	P42702
Macrophage colony-stimulating factor 1 (CSF-1)	Q09603
Macrophage inflammatory protein 1-alpha (MIP-1 alpha)	P10147
Matrix metalloproteinase-1 (MMP-1)	P03956
Matrix metalloproteinase-10 (MMP-10)	Q09238
Monocyte chemotactic protein 1 (MCP-1)	P13500
Monocyte chemotactic protein 2 (MCP-2)	P80075
Monocyte chemotactic protein 3 (MCP-3)	P80098
Monocyte chemotactic protein 4 (MCP-4)	Q99616
Natural killer cell receptor 2B4 (CD244)	Q9BWZ8
Neurotrophin-3 (NT-3)	P20783
Neurturin (NRTN)	Q99748
Oncostatin-M (OSM)	P13725
Osteoprotegerin (OPG)	Q00300
Programmed cell death 1 ligand 1 (PD-L1)	Q9NZQ7
Protein S100-A12 (EN-RAGE)	P80511
Signaling lymphocytic activation molecule (SLAMF1)	Q13291
SIR2-like protein 2 (SIRT2)	Q8IXJ6
STAM-binding protein (STAMPB)	Q95630
Stem cell factor (SCF)	P21583
Sulfotransferase 1A1 (ST1A1)	P50225
T-cell surface glycoprotein CD5 (CD5)	P06127
T-cell surface glycoprotein CD6 isoform (CD6)	P30203
Thymic stromal lymphopoietin (TSLP)	Q969D9
TNF-beta (TNFB)	P01374
TNF-related activation cytokine (TRANCE)	O14788
TNF-related apoptosis ligand (TRAIL)	P50591
Transforming growth factor alpha (TGF-alpha)	P01135
Tumor necrosis factor (Ligand) superfamily member 12 (TWEAK)	Q43508
Tumor necrosis factor (TNF)	P01375
Tumor necrosis factor ligand superfamily member 14 (TNFSF14)	Q43557
Tumor necrosis factor receptor superfamily member 9 (TNFRSF9)	Q07011
Urokinase-type plasminogen activator (uPA)	P00749
Vascular endothelial growth factor A (VEGF A)	P15692

▶ 納品データ例

各ターゲットタンパク質について、相対定量値 (Normalized Protein Expression, NPX) を報告します。

[illegible]

・・・ 92
ターゲット
タンパク質

◇ Cardiovascular II (CVD II)、Cardiovascular III (CVD III)

既知の心血管疾患マーカー、炎症マーカー、および新しい CVD マーカー候補と考えられる探索的ヒトタンパク質が分析対象となるパネルです。II と III の対象タンパク質は完全に異なっており、2 つのパネルで 184 種類のタンパク質がカバーできます。

Olink Target 96 Cardiovascular II

Target	Uniprot No.
2,4-dienoyl-CoA reductase, mitochondrial (DECR1)	Q16698
A disintegrin and metalloproteinase with thrombospondin motifs 13 (ADAM-TS13)	Q76LX8
ADM (ADM)	P35318
Agouti-related protein (AGRP)	O00253
Alpha-L-iduronidase (IDUA)	P35475
Angiopoietin-1 (ANG-1)	Q15389
Angiopoietin-1 receptor (TIE2)	Q02763
Angiotensin-converting enzyme 2 (ACE2)	Q9BYF1
Bone morphogenetic protein 6 (BMP-6)	P22004
Brother of CDO (Protein BOC)	Q9BWW1
Carbonic anhydrase 5A, mitochondrial (CA5A)	P35218
Carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8)	P31997
Cathepsin L1 (CTSL1)	P07711
C-C motif chemokine 17 (CCL17)	Q92583
C-C motif chemokine 3 (CCL3)	P10147
CD40 ligand (CD40-L)	P29965
Chymotrypsin C (CTRC)	Q99895
C-X-C motif chemokine 1 (CXCL1)	P09341
Decorin (DCN)	P07585
Dickkopf-related protein 1 (Dkk-1)	Q94907
Fatty acid-binding protein, intestinal (FABP2)	P12104
Fibroblast growth factor 21 (FGF-21)	Q9NSA1
Fibroblast growth factor 23 (FGF-23)	Q9GZV9
Follistatin (FS)	P19883
Galectin-9 (Gal-9)	O00182
Gastric intrinsic factor (GIF)	P27352
Gastrotropin (GT)	P51161
Growth hormone (GH)	P01241
Growth/differentiation factor 2 (GDF-2)	Q9UK05
Heat shock 27 kDa protein (HSP 27)	P04792
Heme oxygenase 1 (HO-1)	P09601
Hydroxyacid oxidase 1 (HAOX1)	Q9UJM8
Interleukin-1 receptor antagonist protein (IL-1ra)	P18510
Interleukin-1 receptor-like 2 (IL1RL2)	Q9HB29
Interleukin-17D (IL-17D)	Q8TAD2
Interleukin-18 (IL-18)	Q14116
Interleukin-27 (IL27)	Q8NEV9, Q14213
Interleukin-4 receptor subunit alpha (IL-4RA)	P24394
Interleukin-6 (IL-6)	P05231
Lactoylglutathione lyase (GLO1)	Q04760
Lectin-like oxidized LDL receptor 1 (LOX-1)	P78380
Leptin (LEP)	P41159
Lipoprotein lipase (LPL)	P06858
Low affinity immunoglobulin gamma Fc region receptor II-b (IgG Fc receptor II-b)	P31994
Lymphotactin (XCL1)	P47992
Macrophage receptor MARCO (MARCO)	Q9UEW3

Olink Target 96 Cardiovascular III

Target	Uniprot No.
Aminopeptidase N (AP-N)	P15144
Azurocidin (AZU1)	P20160
Bleomycin hydrolase (BLM hydrolase)	Q13867
C-C motif chemokine 15 (CCL15)	Q16663
C-C motif chemokine 16 (CCL16)	O15467
C-C motif chemokine 24 (CCL24)	O00175
C-X-C motif chemokine 16 (CXCL16)	Q9H2A7
Cadherin-5 (CDH5)	P33151
Carboxypeptidase A1 (CPA1)	P15085
Carboxypeptidase B (CPB1)	P15086
Caspase-3 (CASP-3)	P42574
Cathepsin D (CTSD)	P07339
Cathepsin Z (CTSZ)	Q9UBR2
CD166 antigen (ALCAM)	Q13740
Chitinase-3-like protein 1 (CHI3L1)	P36222
Chitotriosidase-1 (CHIT1)	Q13231
Collagen alpha-1(I) chain (COL1A1)	P02452
Complement component C1q receptor (CD93)	Q9NPY3
Contactin-1 (CNTN1)	Q12860
Cystatin-B (CSTB)	P04080
E-selectin (SELE)	P16581
Elafin (PI3)	P19957
Ephrin type-B receptor 4 (EPHB4)	P54760
Epidermal growth factor receptor (EGFR)	P00533
Epithelial cell adhesion molecule (Ep-CAM)	P16422
Fatty acid-binding protein, adipocyte (FABP4)	P15090
Galectin-3 (Gal-3)	P17931
Galectin-4 (Gal-4)	P56470
Granulins (GRN)	P28799
Growth/differentiation factor 15 (GDF-15)	Q99988
Insulin-like growth factor-binding protein 1 (IGFBP-1)	P08833
Insulin-like Growth Factor-Binding Protein 2 (IGFBP-2)	P18065
Insulin-like growth factor-binding protein 7 (IGFBP-7)	Q16270
Integrin beta-2 (ITGB2)	P05107
Intercellular adhesion molecule 2 (ICAM-2)	P13598
Interleukin-1 receptor type 1 (IL-1RT1)	P14778
Interleukin-1 receptor type 2 (IL-1RT2)	P27930
Interleukin-17 receptor A (IL-17RA)	Q96F46
Interleukin-18-binding protein (IL-18BP)	Q95998
Interleukin-2 receptor subunit alpha (IL2-RA)	P01589
Interleukin-6 receptor subunit alpha (IL-6RA)	P08887
Junctional adhesion molecule A (JAM-A)	Q9Y624
Kallikrein-6 (KLK6)	Q92876
Low-density lipoprotein receptor (LDL receptor)	P01130
Lymphotaxin-beta receptor (LTBR)	P36941
Matrix extracellular phosphoglycoprotein (MEPE)	Q9NQ76

Target	Uniprot No.
Matrix metalloproteinase-12 (MMP-12)	P39900
Matrix metalloproteinase-7 (MMP-7)	P09237
Melusin (ITGB1BP2)	Q9UKP3
Natriuretic peptides B (BNP)	P16860
NF-kappa-B essential modulator (NEMO)	Q9Y6K9
Osteoclast-associated immunoglobulin-like receptor (hOSCAR)	Q8IY55
Pappalysin-1 (PAPPA)	Q13219
Pentraxin-related protein PTX3 (PTX3)	P26022
Placenta growth factor (PlGF)	P49763
Platelet-derived growth factor subunit B (PDGF subunit B)	P01127
Poly [ADP-ribose] polymerase 1 (PARP-1)	P09874
Polymeric immunoglobulin receptor (PlgR)	P01833
Programmed cell death 1 ligand 2 (PD-L2)	Q9BQ51
Proheparin-binding EGF-like growth factor (HB-EGF)	Q99075
Pro-interleukin-16 (IL16)	Q14005
Polargirin (PRELP)	P51888
Prostasin (PRSS8)	Q16651
Protein AMBP (AMBP)	P02760
Proteinase-activated receptor 1 (PAR-1)	P25116
Protein-glutamine gamma-glutamyltransferase 2 (TGM2)	P21980
Proto-oncogene tyrosine-protein kinase Src (SRC)	P12931
P-selectin glycoprotein ligand 1 (PSGL-1)	Q14242
Receptor for advanced glycosylation end products (RAGE)	Q15109
Renin (REN)	P00797
Serine protease 27 (PRSS27)	Q9BQR3
Serine/threonine-protein kinase 4 (STK4)	Q13043
Serpin A12 (SERPINA12)	Q8IW75
SLAM family member 5 (CD84)	Q9UIB8
SLAM family member 7 (SLAMF7)	Q9NQ25
Sortilin (SORT1)	Q99523
Spondin-2 (SPON2)	Q9BUD6
Stem cell factor (SCF)	P21583
Superoxide dismutase [Mn], mitochondrial (SOD2)	P04179
T-cell immunoglobulin mucin receptor 1 (TIM)	Q96D42
T-cell surface glycoprotein CD4 (CD4)	P01730
Thrombomodulin (TM)	P07204
Thrombopoietin (THPO)	P40225
Thrombospondin-2 (THBS2)	P35442
Tissue factor (TF)	P13726
TNF-related apoptosis-inducing ligand receptor 2 (TRAIL-R2)	Q14763
Tumor necrosis factor receptor superfamily member 10A (TNFRSF10A)	O00220
Tumor necrosis factor receptor superfamily member 11A (TNFRSF11A)	Q9Y6Q6
Tumor necrosis factor receptor superfamily member 13B (TNFRSF13B)	O14836
Tyrosine-protein kinase Mer (MERTK)	Q12866
Vascular endothelial growth factor D (VEGF-D)	O43915
V-set and immunoglobulin domain-containing protein 2 (VSIG2)	Q96IQ7

Target	Uniprot No.
Matrix metalloproteinase-2 (MMP-2)	P08253
Matrix metalloproteinase-3 (MMP-3)	P08254
Matrix metalloproteinase-9 (MMP-9)	P14780
Metalloproteinase inhibitor 4 (TIMP4)	Q99727
Monocyte chemoattractant protein 1 (MCP-1)	P13500
Myeloblastin (PRTN3)	P24158
Myeloperoxidase (MPO)	P05164
Myoglobin (MB)	P02144
N-terminal prohormone brain natriuretic peptide (NT-pro BNP)	NA
Neurogenic locus notch homolog protein 3 (Notch 3)	Q9UM47
Osteopontin (OPN)	P10451
Osteoprotegerin (OPG)	O00300
P-selectin (SELP)	P16109
Paraoxonase (PON 3) (PON3)	Q15166
Peptidoglycan recognition protein 1 (PGLYRP1)	O75594
Perlecan (PLC)	P98160
Plasminogen activator inhibitor 1 (PAI)	P05121
Platelet endothelial cell adhesion molecule (PECAM-1)	P16284
Platelet-derived growth factor subunit A (PDGF subunit A)	P04085
Platelet glycoprotein VI (GP6)	Q9HCN6
Proprotein convertase subtilisin/kexin type 9 (PCSK9)	Q8NBP7
Protein delta homolog 1 (DLK-1)	P80370
Pulmonary surfactant-associated protein D (PSP-D)	P35247
Resistin (RETN)	Q9HD89
Retinoic acid receptor responder protein 2 (RARRES2)	Q99969
Scavenger receptor cysteine-rich type 1 protein M130 (CD163)	Q86VB7
Secretoglobulin family 3A member 2 (SCGB3A2)	Q96PL1
Spondin-1 (SPON1)	Q9HC86
ST2 protein (ST2)	Q01638
Tartrate-resistant acid phosphatase type 5 (TR-AP)	P13686
Tissue factor pathway inhibitor (TFPI)	P10646
Tissue-type plasminogen activator (t-PA)	P00750
Transferrin receptor protein 1 (TR)	P02786
Trefoil factor 3 (TFF3)	Q07654
Trem-like transcript 2 protein (TLT-2)	Q5T2D2
Tumor necrosis factor ligand superfamily member 13B (TNFSF13B)	Q9Y275
Tumor necrosis factor receptor 1 (TNF-R1)	P19438
Tumor necrosis factor receptor 2 (TNF-R2)	P20333
Tumor necrosis factor receptor superfamily member 10C (TNFRSF10C)	Q14798
Tumor necrosis factor receptor superfamily member 14 (TNFRSF14)	Q92956
Tumor necrosis factor receptor superfamily member 6 (FAS)	P25445
Tyrosine-protein kinase receptor UFO (AXL)	P30530
Tyrosine-protein phosphatase non-receptor type substrate 1 (SHPS-1)	P78324
Urokinase plasminogen activator surface receptor (U-PAR)	Q03405
Urokinase-type plasminogen activator (uPA)	P00749
von Willebrand factor (vWF)	P04275

◇ Oncology

癌の開始と進行の中心となる生物学的メカニズムに関与する 92 のタンパク質が分析対象となるパネルです。II と III の対象タンパク質は完全に異っており、2 つのパネルで 184 種類のタンパク質がカバーできます。血管新生、細胞コミュニケーション、細胞代謝プロセス、アポトーシス、細胞増殖・分化等に関するタンパク質です。III では Cell surface A33 antigen, B-cell receptor CD22 などの癌関連バイオマーカーが対象となっています。

Olink Target 96 Oncology II

Target	Uniprot No.
5'-nucleotidase (5'-NT)	P21589
A disintegrin and metalloproteinase with thrombospondin motifs 15 (ADAM-TS 15)	Q8TE58
Alpha-taxilin (TXLNA)	P40222
Amphiregulin (AR)	P15514
Annexin A1 (ANXA1)	P04083
Carbonic anhydrase 9 (CA9)	Q16790
Carboxypeptidase E (CPE)	P16870
Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1)	P13688
Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5)	P06731
Cathepsin L2 (CTSV)	O60911
CD160 antigen (CD160)	O95971
CD27 antigen (CD27)	P26842
CD48 antigen (CD48)	P09326
CD70 antigen (CD70)	P32970
Cornulin (CRNN)	Q9UBG3
C-type lectin domain family 4 member K (CD207)	Q9UJ71
C-X-C motif chemokine 13 (CXCL13)	O43927
Cyclin-dependent kinase inhibitor 1 (CKN1A)	P38936
Delta-like protein 1 (DLL1)	O00548
Disintegrin and metalloproteinase domain-containing protein (ADAM8)	P78325
Endothelial cell-specific molecule 1 (ESM-1)	Q9NQ30
Ephrin type-A receptor 2 (EPH2)	P29317
FAS-associated death domain protein (FADD)	Q13158
Fc receptor-like B (FCRLB)	Q6BAA4
Fibroblast growth factor-binding protein 1 (FGF-BP1)	Q14512
Folate receptor alpha (FR-alpha)	P15328
Folate receptor gamma (FR-gamma)	P41439
Furin (FURIN)	P09958
Galectin-1 (Gal-1)	P09382
Glypican-1 (GPC1)	P35052
Granzyme B (GZMB)	P10144
Granzyme H (GZMH)	P20718
Hepatocyte growth factor (HGF)	P14210
ICOS ligand (ICOSLG)	O75144
Insulin-like growth factor 1 receptor (IGF1R)	P08069
Integrin alpha-V (ITGAV)	P06756
Integrin beta-5 (ITGB5)	P18084
Interferon gamma receptor 1 (IFN-gamma-R1)	P15260
Interleukin-6 (IL-6)	P05231
Kallikrein-11 (hK11)	Q9UBX7
Kallikrein-13 (KLK13)	Q9UKR3
Kallikrein-14 (hK14)	Q9P0G3
Kallikrein-8 (hK8)	O60259
Ly6/PLAUR domain-containing protein 3 (LYPD3)	O95274
Melanoma-derived growth regulatory protein (MIA)	Q16674
Mesothelin (MSLN)	Q13421

Olink Target 96 Oncology III

Target	Uniprot No.
26S proteasome non-ATPase regulatory subunit 9	O00233
ADP-ribosylation factor-binding protein GGA1	Q9UJY5
Aldose reductase	P15121
Alkaline phosphatase, placental type	P05187
Allograft inflammatory factor 1	P55008
Alpha-actinin-4	O43707
Alpha-fetoprotein	P02771
Aminoacyl tRNA synthase complex-interacting multifunctional protein 1	Q12904
B-cell receptor CD22	P20273
Beta-1,3-N-acetylglucosaminyltransferase radical fringe	Q9Y644
Beta-hexosaminidase subunit alpha	P06865
Cadherin-related family member 2	Q9BYE9
Calcium-binding and coiled-coil domain-containing protein 1	Q9P1Z2
CAP-Gly domain-containing linker protein 2	Q9UDT6
Caspase-2	P42575
Cell division cycle protein 27 homolog	P30260
Cell surface A33 antigen	Q99795
Cerebellin-4	Q9NTU7
Choriogonadotropin subunit beta 3	P0DN86
CMRF35-like molecule 2	Q496F6
Collagen alpha-1(IX) chain	P20849
Complement C1q subcomponent subunit A	P02745
C-X-C motif chemokine 14	O95715
Cytosol aminopeptidase	P28838
Cytosolic 5'-nucleotidase 3A	Q9HP0P
dCTP pyrophosphatase 1	Q9H773
Developmentally-regulated GTP-binding protein 2	P55039
Elongin-A	Q14241
Endoplasmic reticulum resident protein 44	Q9BS26
Endoribonuclease LACTB2	Q53H82
FAD-linked sulphydryl oxidase ALR	P55789
F-box-like/WD repeat-containing protein TBL1X	O60907
Forkhead box protein O3	O43524
General vesicular transport factor p115	O60763
Golgi-associated PDZ and coiled-coil motif-containing protein	Q9HD26
Guanidinoacetate N-methyltransferase	Q14353
Heat shock protein beta-6	O14558
Hemoglobin subunit theta-1	P09105
HLA class I histocompatibility antigen, alpha chain E	P13747
Immunoglobulin J chain	P01591
Inositol polyphosphate 1-phosphatase	P49441
Intercellular adhesion molecule 4	Q14773
Intercellular adhesion molecule 5	Q9UMF0
Interferon gamma receptor 2	P38484
Interleukin-1 beta	P01584
Interleukin-17F	Q96PD4

Target	Uniprot No.
Methionine aminopeptidase 2 (MetAP2)	P50579
MHC class I polypeptide-related sequence A/B (MIC-A/B)	Q29983, Q29980
Midkine (Mk)	P21741
Mothers against decapentaplegic homolog 5 (MAD homolog 5)	Q99717
Mucin-16 (MUC-16)	Q8WXI7
Nectin-4 (PVRL4)	Q96NY8
Pancreatic prohormone (PPY)	P01298
Podocalyxin (PODXL)	O00592
Pro-epidermal growth factor (EGF)	P01133
Protein CYR61 (CYR61)	O00622
Protein S100-A11 (S100A11)	P31949
Protein S100-A4 (S100A4)	P26447
Proto-oncogene tyrosine-protein kinase receptor Ret (RET)	P07949
Receptor tyrosine-protein kinase erbB-2 (ERBB2)	P04626
Receptor tyrosine-protein kinase erbB-3 (ERBB3)	P21860
Receptor tyrosine-protein kinase erbB-4 (ERBB4)	Q15303
R-spondin-3 (RSPO3)	Q98XY4
Secretory carrier-associated membrane protein 3 (SCAMP3)	O14828
Seizure 6-like protein (SEZ6L)	Q9BYH1
SPARC (SPARC)	P09486
Stem cell factor (SCF)	P21583
Syndecan-1 (SYND1)	P18827
T-cell leukemia / lymphoma protein 1A (TCL1A)	P56279
TGF-beta receptor type-2 (TGFR-2)	P37173
Tissue factor pathway inhibitor 2 (TFPI-2)	P48307
T-lymphocyte surface antigen Ly-9 (LY9)	Q9HBG7
TNF-related apoptosis-inducing ligand (TRAIL)	P50591
Toll-like receptor 3 (TLR3)	O15455
Transforming growth factor alpha (TGF-alpha)	P01135
Transmembrane glycoprotein NMB (GPNMB)	Q14956
Tumor necrosis factor ligand superfamily member 13 (TNFSF13)	O75888
Tumor necrosis factor ligand superfamily member 6 (FASLG)	P48023
Tumor necrosis factor receptor superfamily member 19 (TNFRSF19)	Q9N568
Tumor necrosis factor receptor superfamily member 4 (TNFRSF4)	P43489
Tumor necrosis factor receptor superfamily member 6B (TNFRSF6B)	O95407
Tyrosine-protein kinase ABL1 (ABL1)	P00519
Tyrosine-protein kinase Lyn (LYN)	P07948
WAP four-disulfide core domain protein 2 (WFDC2)	Q14508
Vascular endothelial growth factor A (VEGF-A)	P15692
Vascular endothelial growth factor receptor 2 (VEGFR-2)	P35968
Vascular endothelial growth factor receptor 3 (VEGFR-3)	P35916
VEGF-co regulated chemokine 1 (CXL17)	Q6UXB2
Vimentin (VIM)	P08670
Wnt inhibitory factor 1 (WIF-1)	Q9Y5W5
WNT1-inducible-signaling pathway protein 1 (WISP-1)	O95388
Xaa-Pro aminopeptidase 2 (XPNPPE2)	O43895

Target	Uniprot No.
Kallikrein-4	Q9Y5K2
Lymphocyte-specific protein 1	P33241
MANSC domain-containing protein 1	Q9H8J5
N-acetylgalactosaminyltransferase 7	Q865F2
Neural cell adhesion molecule L1	P32004
Neuronal calcium sensor 1	P62166
Nicotinamide phosphoribosyltransferase	P43490
peroxisomal 3-ketoacyl-CoA thiolase	P09110
Persephin	O60542
Porphobilinogen deaminase	P08397
Probable serine carboxypeptidase CPVL	Q9H3G5
Promotilin	P12872
Pro-neuropeptide Y	P01303
Protein BRICK1	Q8WUW1
Protein canopy homolog 2	Q9Y280
Protein kinase C-binding protein NELL1	Q92832
Protein S100-A16	Q96FQ6
Protein tyrosine phosphatase type IVA 1	Q93096
Protein XRP2	O75695
Protocadherin-1	Q08174
Pulmonary surfactant-associated protein A1	Q8IWL2
Ras-related protein Rab-6A	P20340
Receptor-type tyrosine-protein kinase FLT3	P36888
Receptor-type tyrosine-protein phosphatase mu	P28827
Rho GTPase-activating protein 25	P42331
RNA-binding protein FUS	P35637
Secretagogin	O76038
Secretogranin-2	P13521
Selenocysteine lyase	Q96115
Septin-9	Q9UHD8
Serine protease inhibitor Kazal-type 4	O60575
Synaptic vesicle membrane protein VAT-1 homolog	Q99536
T-complex protein 1 subunit epsilon	P48643
Thiopurine S-methyltransferase	P51580
Thioredoxin domain-containing protein 15	Q96J42
Translationally-controlled tumor protein	P13693
Tumor necrosis factor alpha-induced protein 8	O95379
Ubiquitin-associated domain-containing protein 1	Q9BSL1
Unconventional myosin-Ixb	Q13459
Vacuolar protein sorting-associated protein 37A	Q8NE22
Vacuolar protein sorting-associated protein 53 homolog	Q5VIR6
Vascular endothelial growth factor receptor 1	P17948
Vitelline membrane outer layer protein 1 homolog	Q7Z5L0
von Willebrand factor A domain-containing protein 1	Q6PCB0
V-type proton ATPase subunit D	Q9Y5K8
YTH domain-containing family protein 3	Q7Z739

Olink Target 96 Neurology

神経学的疾患（例えば、神経発達、軸索ガイダンス、シナプス機能、またはアルツハイマー病などの特定の状態）に関与するタンパク質が分析対象です。

Target	Uniprot No.
ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1 (CD38)	P28907
Alpha-2-macroglobulin receptor-associated protein (Alpha-2-MRAP)	P30533
BDNF/NT-3 growth factors receptor (NTRK2)	Q16620
Beta-nerve growth factor (Beta-NGF)	P01138
Bone morphogenetic protein 4 (BMP-4)	P12644
Brevican core protein (BCAN)	Q96GW7
Brorin (VWC2)	Q2TAL6
Cadherin-3 (CDH3)	P22223
Cadherin-6 (CDH6)	P55285
Carboxypeptidase A2 (CPA2)	P48052
Carboxypeptidase M (CPM)	P14384
Cathepsin 5 (CTSS)	P25774
Cell adhesion molecule 3 (CADM3)	Q8N126
Cell surface glycoprotein CD200 receptor 1 (CD200R1)	Q8TD46
CMRF35-like molecule 1 (CLM-1)	Q8TDQ1
CMRF35-like molecule 6 (CLM-6)	Q08708
Contactin-5 (CNTN5)	Q94779
C-type lectin domain family 1 member B (CLEC1B)	Q9P126
C-type lectin domain family 10 member A (CLEC10A)	Q8IU9N
Cytotoxic and regulatory T-cell molecule (CRTAM)	Q95727
Dickkopf-related protein 4 (Dkk-4)	Q9UBT3
Dipeptidyl peptidase 1 (CTSC)	P53634
Disintegrin and metalloproteinase domain-containing protein 22 (ADAM 22)	Q9P0K1
Disintegrin and metalloproteinase domain-containing protein 23 (ADAM 23)	Q75077
Draxin (DRAXIN)	Q8NBI3
Ephrin type-B receptor 6 (EPHB6)	O15197
Ephrin-A4 (EFNA4)	P52798
Epithelial discoidin domain-containing receptor 1 (DDR1)	Q08345
Ezrin (EZR)	P15311
Fc receptor-like protein 2 (FcRL2)	Q96LA5
Galectin-8 (gal-8)	O00214
GDNF family receptor alpha-1 (GFR-alpha-1)	P56159
GDNF family receptor alpha-3 (GDNFR-alpha-3)	O60609
Glial cell line-derived neurotrophic factor (GDNF)	P39905
Glypican-5 (GCP5)	P78333
Granulocyte Colony-Stimulating Factor (G-CSF)	P09919
Granulocyte-macrophage colony-stimulating factor receptor subunit alpha (GM-CSF-R-alpha)	P15509
Granzyme A (GZMA)	P12544
Growth/differentiation factor 8 (GDF-8)	O14793
Hydroxyacylglutathione hydrolase, mitochondrial (HAGH)	Q16775
Interleukin-12 subunit beta, Interleukin-12 subunit alpha (IL-12B, IL-12A)	P29460, P29459
Interleukin-5 receptor subunit alpha (IL-5R-alpha)	Q01344
Junctional adhesion molecule B (JAM-B)	P57087
Kynureninase (KYNU)	Q16719
Latexin (LXN)	Q9B540
Layilin (LAYN)	Q6UX15

Target	Uniprot No.
Leucine-rich repeat transmembrane protein FLRT2 (FLRT2)	Q43155
Leukocyte-associated immunoglobulin-like receptor 2 (LAIR-2)	Q6I554
Linker for activation of T-cells family member 1 (LAT)	Q43561
Lysosome membrane protein 2 (SCARB2)	Q14108
Macrophage scavenger receptor types I and II (MSR1)	P21757
MAM domain-containing glycosylphosphatidylinositol anchor protein 1 (MDGA1)	Q8NFP4
Microtubule-associated protein tau (MAPT)	P10636
Matrilin-3 (MATN3)	O15232
Mesencephalic astrocyte-derived neurotrophic factor (MANF)	P55145
N-acylethanolamine-hydrolyzing acid amidase (NAAA)	Q02083
Nephrilysin (NEP)	P08473
Netrin receptor UNC5C (UNC5C)	Q95185
Neuroblastoma suppressor of tumorigenicity 1 (NBL1)	P41271
Neurocan core protein (NCAN)	O14594
Neuronal cell adhesion molecule (Nr-CAM)	Q92823
Neuropilin-2 (NRP2)	Q60462
Neutral ceramidase (N-Cdase)	Q9NR71
Nicotinamide/nicotinic acid mononucleotide adenylyltransferase 1 (NMNAT1)	Q9HAN9
NKG2D ligand 2 (N2DL-2)	Q9BZM5
NT-3 growth factor receptor (NTRK3)	Q16288
OX-2 membrane glycoprotein (CD200)	P41217
Platelet-derived growth factor receptor alpha (PDGF-R-alpha)	P16234
Plexin-B1 (PLXNB1)	Q43157
Plexin-B3 (PLXNB3)	Q9ULL4
Poliovirus receptor (PVR)	P15151
Protogenin (PRTG)	Q2VWP7
Repulsive guidance molecule A (RGMA)	Q96B86
RGM domain family member B (RGMb)	Q6NW40
Roundabout homolog 2 (ROBO2)	Q9HCK4
R-spondin-1 (RSP01)	Q2MKA7
Scavenger receptor class A member 5 (SCARA5)	Q6ZMJ2
Scavenger receptor class F member 2 (SCARF2)	Q96GP6
Secreted frizzled-related protein 3 (sFRP-3)	Q92765
Serine/threonine-protein kinase receptor R3 (SKR3)	P37023
Sialic acid-binding Ig-like lectin 9 (Siglec-9)	Q9Y336
Sialoadhesin (SIGLEC1)	Q9BZZ2
SPARC-related modular calcium-binding protein 2 (SMOC2)	Q9H3U7
Sphingomyelin phosphodiesterase (SMPD1)	P17405
Tenascin-R (TN-R)	Q92752
Testican-1 (SPOCK1)	Q08629
Thy-1 membrane glycoprotein (THY 1)	P04216
Transmembrane protease serine 5 (TMPRSS5)	Q9H353
Tumor necrosis factor receptor superfamily member 12A (TNFRSF12A)	Q9NP84
Tumor necrosis factor receptor superfamily member 21 (TNFRSF21)"	O75509
Tumor necrosis factor receptor superfamily member 27 (EDA2R)	Q9HAV5
WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein 1 (WFIKKN1)	Q96NZ8

Olink Target 96 Immuno-Oncology

免疫腫瘍学分野のバイオマーカー（腫瘍免疫の促進や阻害、走化性、血管や組織のリモデリング、アポトーシス等）が分析対象です。

Target	Uniprot No.
Adenosine deaminase	P00813
Adhesion G-protein coupled receptor G1	Q9Y653
Angiopoietin-1	Q15389
Angiopoietin-1 receptor	Q02763
Angiopoietin-2	O15123
Arginase-1	P05089
Carbonic anhydrase 9	Q16790
Caspase-8	Q14790
C-C motif chemokine 13	Q99616
C-C motif chemokine 17	Q92583
C-C motif chemokine 19	Q99731
C-C motif chemokine 2	P13500
C-C motif chemokine 20	P78556
C-C motif chemokine 23	P55773
C-C motif chemokine 3	P10147
C-C motif chemokine 4	P13236
C-C motif chemokine 7	P80098
C-C motif chemokine 8	P80075
CD27 antigen	P26842
CD40 ligand	P29965
CD40L receptor	P25942
CD70 antigen	P32970
CD83 antigen	Q01151
C-X-C motif chemokine 1	P09341
C-X-C motif chemokine 10	P02778
C-X-C motif chemokine 11	O14625
C-X-C motif chemokine 13	O43927
C-X-C motif chemokine 5	P42830
C-X-C motif chemokine 9	Q07325
Cytotoxic and regulatory T-cell molecule	Q95727
Decorin	P07585
Fas antigen ligand	P48023
Fibroblast growth factor 2	P09038
Fractalkine	P78423
Galectin-1	P09382
Galectin-9	O00182
Granzyme A	P12544
Granzyme B	P10144
Granzyme H	P20718
Heme oxygenase 1	P09601
Hepatocyte growth factor	P14210
ICOS ligand	O75144
Interferon gamma	P01579
Interleukin-1 alpha	P01583
Interleukin-10	P22301
Interleukin-12	P29459,P29460

Target	Uniprot No.
Interleukin-12 receptor subunit beta-1	P42701
Interleukin-13	P35225
Interleukin-15	P40933
Interleukin-18	Q14116
Interleukin-2	P60568
Interleukin-33	Q95760
Interleukin-4	P05112
Interleukin-5 (IL-5)	P05113
Interleukin-6	P05231
Interleukin-7	P13232
Interleukin-8	P10145
Killer cell iumunoglobulin-like receptor 3DL (KIR3DL1)	P43629
Latency-associated peptide transforming growth factor beta-1	P01137
Lymphocyte activation gene 3 protein (LAG-3)	P18627
Lysosome-associated membrane glycoprotein 3	Q9UQV4
Macrophage colony-stimulating factor 1	P09603
Macrophage metalloproteinase-12	P39900
Matrix metalloproteinase-7	P09237
MHC class I polypeptide-related sequence A/B	Q29983,Q29980
Mucin-16 (MUC-16)	Q8WXI7
Natural cytotoxicity triggering receptor	O76036
Natural killer cell receptor 2B4	Q9BZW8
Natural killer cells antigen CD94	Q13241
Nitric oxide synthase, endothelial	P29474
Placenta growth factor	P49763
Platelet-derived growth factor subunit B	P01127
Pleiotrophin	P21246
Pro-epidermal growth factor	P01133
Programmed cell death 1 ligand 1	Q9NZQ7
Programmed cell death 2 ligand 2	Q9BQ51
Programmed cell death protein 1	Q15116
Stromal cell-derived factor 1	P48061
T-cell surface glycoprotein CD4	P01730
T-cell surface glycoprotein CD5	P06127
T-cell surface glycoprotein CD8 alpha chain	P01732
T-cell-specific surface glycoprotein CD28	P10747
TNF-related apoptosis-inducing ligand	P50591
Tumor necrosis factor	P01375
Tumor necrosis factor ligand superfamily member 12	Q43508
Tumor necrosis factor ligand superfamily member 14	Q43557
Tumor necrosis factor receptor superfamily member 12A	Q9NP84
Tumor necrosis factor receptor superfamily member 21	O75509
Tumor necrosis factor receptor superfamily member 4	P43489
Tumor necrosis factor receptor superfamily member 9	Q07011
Vascular endothelial growth factor A	P15692
Vascular endothelial growth factor receptor 2	P35968

Olink Target 96 Cardiometabolic 心代謝プロセス関連

Target	Uniprot No.
Angiogenin	P03950
Angiopoietin-related protein 3	Q9Y5C1
Apolipoprotein M	O95445
Beta-Ala-His dipeptidase	Q96KN2
Beta-galactoside alpha-2,6-sialyltransferase 1	P15907
C-C motif chemokine 14	Q16627
C-C motif chemokine 18	P55774
C-C motif chemokine 5	P13501
Cadherin-1	P12830
Carbonic anhydrase 1	P00915
Carbonic anhydrase 3	P07451
Carbonic anhydrase 4	P22748
Cartilage acidic protein 1	Q9NQ79
Cartilage oligomeric matrix protein	P49747
CD59 glycoprotein	P13987
Coagulation factor VII	P08709
Coagulation factor XI	P03951
Collagen alpha-1(XVIII) chain	P39060
Complement C1q tumor necrosis factor-related protein 1	Q9BXJ1
Complement C2	P06681
Complement factor H-related protein 5	Q9BXR6
Complement receptor type 2	P20023
Cystatin-C	P01034
Dipeptidyl peptidase 4	P27487
EGF-containing fibulin-like extracellular matrix protein 1	Q12805
Endoglin	P17813
Fetuin-B	Q9UGM5
Ficolin-2	Q15485
GlutaminyI-peptide cyclotransferase	Q16769
Granulysin	P22749
Growth arrest-specific protein 6	Q14393
Hepatocyte growth factor receptor	P08581
Ig lambda-2 chain C regions	P0DOY2
Insulin-like growth factor-binding protein 3	P17936
Insulin-like growth factor-binding protein 6	P24592
Integrin alpha-M	P11215
Intercellular adhesion molecule 1	P05362
Intercellular adhesion molecule 3	P32942
Interleukin-7 receptor subunit alpha	P16871
L-selectin	P14151
Latent-transforming growth factor beta-binding protein 2	Q14767
Leukocyte immunoglobulin-like receptor subfamily B member 1	Q8NHL6
Leukocyte immunoglobulin-like receptor subfamily B member 2	Q8N423
Leukocyte immunoglobulin-like receptor subfamily B member 5	O75023
Lithostathine-1-alpha	P05451
Liver carboxylesterase 1	P23141

Target	Uniprot No.
Low affinity immunoglobulin gamma Fc region receptor II-a	P12318
Low affinity immunoglobulin gamma Fc region receptor III-B	O75015
Lymphatic vessel endothelial hyaluronid acid receptor 1	Q9Y5Y7
Lysoosomal Pro-X carboxypeptidase	P42785
Mannose-binding protein C	P11226
Mast/stem cell growth factor receptor Kit	P10721
Membrane cofactor protein	P15529
Membrane primary amine oxidase	Q16853
Metalloproteinase inhibitor 1	P01033
Microfibrillar-associated protein 5	Q13361
Multiple epidermal growth factor-like domains protein 9	Q9H1U4
Neural cell adhesion molecule 1	P13591
Neural cell adhesion molecule L1-like protein	O00533
Neurogenic locus notch homolog protein 1	P46531
Neuropilin-1	O14786
Neutrophil defensin 1	P59665
Neutrophil gelatinase-associated lipocalin	P80188
Nidogen-1	P14543
Oncostatin-M-specific receptor subunit beta	Q99650
Peptidyl-glycine alpha-amidating monooxygenase	P19021
Phospholipid transfer protein	P55058
Plasma serine protease inhibitor	P05154
Platelet glycoprotein Ib alpha chain	P07359
Platelet-activating factor acetylhydrolase	Q13093
Plexin-B2	O15031
Procollagen C-endopeptidase enhancer 1	Q15113
Prolyl endopeptidase FAP	Q12884
Receptor-type tyrosine-protein phosphatase 5	Q13332
Regenerating islet-derived protein 3-alpha	Q06141
Serum amyloid A-4 protein	P35542
SPARC-like protein 1	Q14515
Superoxide dismutase [Cu-Zn]	P00441
T-cell immunoglobulin and mucin domain-containing protein 4	Q96H15
Tenascin	P24821
Tenascin-X	P22105
Thrombospondin-4	P35443
Thyroxine-binding globulin	P05543
Transcobalamin-2	P20062
Transforming growth factor beta receptor type 3	Q03167
Transforming growth factor-beta-induced protein ig-h3	Q15582
Trypsin-2	P07478
Tyrosine-protein kinase receptor Tie-1	P35590
Uromodulin	P07911
Vascular cell adhesion protein 1	P19320
Vasorin	Q6EMK4
Vitamin K-dependent protein C	P04070

Olink Target 96 Cell Regulation 細胞コミュニケーション、アポトーシスプロセス、細胞周期、細胞分化など

Target	Uniprot No.
Amphoterin-induced protein 2	Q865J2
Amyloid beta A4 precursor protein-binding family B member 1-interacting protein	Q7Z5R6
Anterior gradient protein 3	Q8TD06
Arylsulfatase B	P15848
ATP-dependent 6-phosphofructokinase, muscle type	P08237
Bcl-2-like protein 11 isoform BimL	O43521-2
Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase	Q02742
Biglycan	P21810
Bile salt sulfotransferase	Q06520
Breakpoint cluster region protein	P11274
Brother of CDO	Q9BWV1
C-type mannose receptor 2	Q9UBG0
Calcium/calmodulin-dependent protein kinase kinase 1	Q8N5S9
Calsyntenin-3	Q9BQT9
Cell growth-regulating nucleolar protein	Q9NX58
Cellular tumor antigen p53	P04637
Cerebral dopamine neurotrophic factor	Q49AH0
Collagen alpha-1(IV) chain	P02462
Cone-rod homeobox protein	O43186
Cryptic protein	P0CG37
Cysteine protease ATG4A	Q8WYN0
Cysteine-rich secretory protein 2	P16562
Dickkopf-like protein 1	Q9UK85
Discoidin, CUB and LCCL domain-containing protein 2	Q96PD2
DnaJ homolog subfamily B member 1	P25685
Dual specificity mitogen-activated protein kinase kinase 6	P52564
Dynactin subunit 2	Q13561
E3 ubiquitin-protein ligase CBL	P22681
Ectonucleoside triphosphate diphosphohydrolase 6	O75354
Fibroblast growth factor 21	Q9NSA1
Friend leukemia integration 1 transcription factor	Q01543
Galectin-7	P47929
Gamma-secretase-activating protein	A4D1B5
Gastrokine	Q9NS71
GDNF family receptor alpha-2	O00451
Glucagon	P01275
Growth hormone variant	P01242
Heparan sulfate glucosamine 3-O-sulfotransferase 3B1	Q9Y662
Heparan-sulfate 6-O-sulfotransferase 1	O60243
Immunoglobulin superfamily member 3	O75054
Interleukin-17 receptor B	Q9NRM6
Kallikrein-12	Q9UKR0
Kazal-type serine protease inhibitor domain-containing protein 1	Q96I82
Leucine-rich repeat neuronal protein 1	Q6UXK5
Ly6/PLAUR domain-containing protein 1	Q8N2G4
Lymphoid-restricted membrane protein	Q12912

Target	Uniprot No.
Methionine aminopeptidase 1D, mitochondrial	Q6UB28
Myelin-oligodendrocyte glycoprotein	Q16653
NI(G),NI(G)-dimethylarginine dimethylaminohydrolase 1	O94760
NF-kappa-B inhibitor epsilon	O00221
Nicalin	Q969V3
Ninjurin-1	Q92982
Nuclear factor of activated T-cells, cytoplasmic 1	O95644
Oligodendrocyte-myelin glycoprotein	P23515
Opticin	Q9UBM4
Peroxiredoxin-6	P30041
Podocalyxin-like protein 2	Q9NZ53
Polypeptide N-acetylglucosaminyltransferase 2	Q10471
Probable carboxypeptidase X1	Q965M3
Prokineticin-1	P58294
Prolactin regulatory element-binding protein	Q9HCU5
Protein FAM19A5	Q7Z5A7
Protein Wnt-9a	O14904
Protocadherin-17	O14917
Ras GTPase-activating-like protein IQGAP2	Q13576
Regulator of G-protein signaling 8	P57771
Rho GTPase-activating protein 1	Q07960
Rho guanine nucleotide exchange factor 12	Q9NZN5
Seizure 6-like protein 2	Q6UXD5
Semaphorin-4C	Q9C0C4
Serine/threonine-protein kinase PAK 4	O96013
Sialic acid-binding Ig-like lectin 10	Q96LC7
Sialic acid-binding Ig-like lectin 6	O43699
SLAM family member 8	Q9POV8
SLIT and NTRK-like protein 2	Q9H156
SLIT and NTRK-like protein 6	Q9HSY7
Src kinase-associated phosphoprotein 1	Q86WW1
Syntaxin-16	O14662
Syntaxin-6	O43752
T-cell leukemia/lymphoma protein 1B	O95988
Transcription factor AP-1	P05412
Transforming acidic coiled-coil-containing protein 3	Q9Y6A5
Tudor and KH domain-containing protein	Q9Y2W6
Tumor necrosis factor receptor superfamily member 10A	O00220
Tumor-associated calcium signal transducer 2	P09758
Vascular endothelial growth factor D	O43915
Vesicle-associated membrane protein 5	Q95183
VPS10 domain-containing receptor SorCS2	Q96PQ0
Wiskott-Aldrich syndrome protein family member 1	Q92558
Wiskott-Aldrich syndrome protein family member 3	Q9UPY6
Zinc finger and BTB domain-containing protein 16	Q05516
Zinc finger and BTB domain-containing protein 17	Q13105

Olink Target 96 Neuro Exploratory 神経関連疾患や、軸索の発達、神経新生、シナプス形成などのプロセスに関与するタンパク質が対象。

Target	Uniprot No.
6-pyruvoyl tetrahydrobiopterin synthase	Q03393
Adhesion G protein-coupled receptor B3	O60242
Alanyl-tRNA editing protein Aarsd1	Q98TE6
Alpha-(1,6)-fucosyltransferase	Q98YC5
Amiloride-sensitive amine oxidase [copper- containing]	P19801
Annexin A10	Q9UJ72
Asialoglycoprotein receptor 1	P07306
Beta-defensin 4A	O15263
Beta-klotho	Q86Z14
Bis(5'-adenosyl)-triphosphatase	P49789
Bone marrow stromal antigen 2	Q10589
C-C motif chemokine 27	Q9Y4X3
Cadherin-15	P55291
Cadherin-17	Q12864
Calcineurin subunit B type 1	P63098
Calcium-regulated heat-stable protein 1	Q9Y2V2
Calsyntenin-1	O94985
Carcinoembryonic antigen-related cell adhesion molecule 3	P40198
Cardiotrophin-1	Q16619
CD302 antigen	Q8IX05
CD63 antigen	P08962
Centrin-2	Q1208
Collagen type IV alpha-3-binding protein	Q9Y5P4
Cysteine-rich protein 2	P52943
Death domain-containing protein	P78560
Desmoglein-3	P32926
Dipeptidase 1	P16444
Dipeptidase 2	Q9H4A9
Disintegrin and metalloproteinase domain- containing protein 15	Q13444
Dual specificity protein phosphatase 3	P51452
E3 ubiquitin-protein ligase RNF31	Q96EP0
Endoplasmic	P14625
Endothelin-converting enzyme 1	P42892
Ephrin type-A receptor 10	Q5JZY3
Eukaryotic translation initiation factor 4B	P23588
Fibroblast growth factor receptor 2	P21802
Gamma-interferon-inducible lysosomal thiol reductase	P13284
Gamma-synuclein	O76070
Glutathione hydrolase 5 proenzyme	P36269
Glutathione S-transferase P	P09211
Glycodelin	P09466
Group 10 secretory phospholipase A2	O15496
Guanylate-binding protein 2	P32456
Heme oxygenase 2	P30519
Immunoglobulin alpha Fc receptor	P24071
Immunoglobulin superfamily containing leucine-rich repeat protein 2	Q6UXK2

Target	Uniprot No.
Inhibitor of growth protein 1	Q9UK53
Inositol monophosphatase 1	P29218
Integrin-linked kinase-associated serine/ threonine phosphatase 2C	Q9HOC8
Interferon lambda-1	Q8IU54
Interleukin-15	P40933
Interleukin-3 receptor subunit alpha	P26951
Interleukin-32	P24001
KIF1-binding protein	Q96EK5
Killer cell immunoglobulin-like receptor 2DL3	P43628
Kin of IRE-like protein 2	Q6UWL6
Latent-transforming growth factor beta-binding protein 3	Q9NS15
Leptin receptor	P48357
Mitotic spindle assembly checkpoint protein MAD1	Q9Y6D9
Myeloid cell surface antigen CD33	P20138
N-alpha-acetyltransferase 10	P41227
NEDD4-like E3 ubiquitin-protein ligase	Q00308
NEDD8-conjugating enzyme UBE2F	Q969M7
Neurexophilin-1	P58417
Neurofilament light polypeptide	P07196
Nucleophosmin	P06748
Peptidyl-prolyl cis-trans isomerase FKBP5	Q13451
Peptidyl-prolyl cis-trans isomerase FKBP7	Q9Y680
Phosphoethanolamine/phosphocholine phosphatase	Q8TCT1
Phosphomevalonate kinase	Q15126
Phosphoribosyltransferase domain-containing protein 1	Q9NRG1
Prefoldin subunit 2	Q9UHV9
Pregnancy-specific beta-1-glycoprotein 1	P11464
Proepiregulin	O14944
Proline-rich AKT1 substrate 1	Q96B36
Proteasome activator complex subunit 1	Q06323
Protein ABHD14B	Q96IU4
Protein NDRG1	Q92597
Ribokinase	Q9H477
Ribosomal protein S6 kinase beta-1	P23443
Secreted frizzled-related protein 1	Q8N474
Signal recognition particle 14 kDa protein	P37108
SPARC-related modular calcium-binding protein 1	Q9H4F8
Teratocarcinoma-derived growth factor 1	P13385
Transmembrane glycoprotein NMB	Q14956
Tubulin polymerization-promoting protein family member 3	Q9BW30
Tubulin-folding cofactor B	Q99426
Tumor necrosis factor receptor superfamily member 13C	Q96RJ3
Tyrosine-protein phosphatase non-receptor type 1	P18031
V-set and transmembrane domain-containing protein 1	Q6UX27
V-type proton ATPase subunit F	Q16864
Zinc finger protein Helios	Q9UKS7

Olink Target 96 Immune Response 適応免疫応答、ウイルスに対する防御応答、リンパ球の活性化、炎症応答、サイトカインを介したシグナル伝達経路などの重要な生物学的プロセスに関与するタンパク質が対象。

Target	Uniprot No.
Allergen-1	Q7Z6M3
Amphiregulin	P15514
Aryl hydrocarbon receptor nuclear translocator (ARNT protein)	P27540
Baculoviral IAP repeat-containing protein 2	Q13490
Beta-galactosidase	P16278
Butyrophilin subfamily 3 member A2	P78410
CD83 antigen (hCD83)	Q01151
Contactin-associated protein-like 2	Q9UHC6
Corneodesmosin	Q15517
Corticosteroid 11-beta-dehydrogenase isozyme 1	P28845
Coxsackievirus and adenovirus receptor (CAR)	P78310
C-type lectin domain family 4 member A	Q9UMR7
C-type lectin domain family 4 member C	Q8WTT0
C-type lectin domain family 4 member D	Q8WXI8
C-type lectin domain family 4 member G	Q6UXB4
C-type lectin domain family 6 member A	Q6EIG7
C-type lectin domain family 7 member A	Q9BXN2
Cytoskeleton-associated protein 4	Q07065
Diacylglycerol kinase zeta (DAG kinase zeta)	Q13574
Discoidin, CUB and LCCL domain-containing protein 2	Q96PD2
DNA fragmentation factor subunit alpha	O00273
Dual adapter for phosphotyrosine and 3-phosphotyrosine and 3-phosphoinositide (hDAPP1)	Q9UN19
Dynactin subunit 1	Q14203
E3 ubiquitin-protein ligase TRIM21	P19474
Egl nine homolog 1	Q9GZT9
Eotaxin	P51671
Eukaryotic translation initiation factor 4 gamma 1 (eIF-4-gamma 1)	Q04637
Eukaryotic translation initiation factor 5A-1 (eIF-5A-1)	P63241
Fc receptor-like protein 3 (FcR-like protein 3)	Q96P31
Fc receptor-like protein 6 (FcR-like protein 6)	Q6DN72
Fibroblast growth factor 2 (FGF-2)	P09038
FXD domain-containing ion transport regulator 5	Q96DB9
Hematopoietic lineage cell-specific protein	P14317
Histamine N-methyltransferase (HMT)	P50135
Importin subunit alpha-5	P52294
Inactive dipeptidyl peptidase 10	Q8N608
Integral membrane protein 2A	O43736
Integrin alpha-11	Q9UKX5
Integrin alpha-6	P23229
Integrin beta-6	P18564
Interferon lambda receptor 1 (IFN-lambda receptor 1)	Q8IU57
Interferon regulatory factor 9 (IRF-9)	Q00978
Interleukin-1 receptor-associated kinase 1 (IRAK-1)	P51617
Interleukin-1 receptor-associated kinase 4 (IRAK-4)	Q9NWZ3
Interleukin-10 (IL-10)	P22301
Interleukin-12 receptor subunit beta-1 (IL-12 receptor subunit beta-1)	P42701

Target	Uniprot No.
Interleukin-5 (IL-5)	P05113
Interleukin-6 (IL-6)	P05231
Islet cell autoantigen 1	Q05084
Keratin, type I cytoskeletal 19	P08727
Leukocyte immunoglobulin-like receptor subfamily B member 4	Q8NHJ6
Lymphocyte activation gene 3 protein (LAG-3)	P18627
Lymphocyte antigen 75 (Ly-75)	O60449
Lysosome-associated membrane glycoprotein 3 (LAMP-3)	Q9UQV4
Mannan-binding lectin serine protease 1	P48740
Merlin	P35240
Methylated-DNA--protein-cysteine methyltransferase	P16455
Natural cytotoxicity triggering receptor 1	O76036
Natural killer cells antigen CD94	Q13241
Neurabin-2	Q965B3
Neurotrophin-4 (NT-4)	P34130
Nuclear factor of activated T-cells, cytoplasmic 3 (NF-ATc3)	Q12968
Parathyroid hormone/parathyroid hormone-related peptide receptor	Q03431
PC4 and SFRS1-interacting protein	O75475
Peroxiredoxin-1	Q06830
Peroxiredoxin-5, mitochondrial	P30044
Phosphoinositide 3-kinase adapter protein 1	Q6ZUJ8
Plexin-A4	Q9HCM2
Polypeptide N-acetylgalactosaminyltransferase 3	Q14435
Probable ATP-dependent RNA helicase DDX58	Q95786
Protein FAM3B	P58499
Protein HEXIM1	Q94992
Protein kinase C theta type	Q04759
Protein sprouty homolog 2 (Spry-2)	Q43597
Protein-arginine deiminase type-2	Q9Y2J8
SH2 domain-containing protein 1A	Q60880
SH2B adapter protein 3	Q9UQQ2
Signaling threshold-regulating transmembrane adapter 1	Q9Y3P8
SRSF protein kinase 2	P78362
Stanniocalcin-1 (STC-1)	P52823
Stromal cell-derived factor 1 (SDF-1)	P48061
T-cell-specific surface glycoprotein CD28	P10747
Thioredoxin-dependent peroxide reductase, mitochondrial	P30048
TNF receptor-associated factor 2	Q12933
TRAF family member-associated NF-kappa-B activator	Q92844
Transcription factor AP-1	P05412
Transcription regulator protein BACH1	O14867
Triggering receptor expressed on myeloid cells 1 (TREM-1)	Q9NP99
Tripartite motif-containing protein 5	Q9C035
Tryptase alpha/beta-1 (Tryptase-1)	Q15661
Tumor necrosis factor receptor superfamily member EDAR	Q9UNE0
Zinc finger and BTB domain-containing protein 16	Q05516

Olink Target 96 Development細胞の移動や運動、細胞外マトリックスの組織化、神経新生などのプロセスに関与するタンパク質が対象。

Target	Uniprot No.
ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2	Q10588
ADP-sugar pyrophosphatase	Q9UUK9
Aggrecan core protein	P16112
Amyloid beta A4 protein	P05067
Angiopoietin-related protein 4	Q9BY76
Arylsulfatase A	P15289
Basal cell adhesion molecule	P50895
Beta-1,4-galactosyltransferase 1	P15291
Beta-1,4-glucuronyltransferase 1	O43505
Beta-glucuronidase	P08236
Beta-microseminoprotein	P08118
C-C motif chemokine 21	O00585
C-type lectin domain family 11 member A	Q9Y240
C-type lectin domain family 14 member A	Q86T13
Carbonic anhydrase 2	P00918
Carbonic anhydrase 6	P23280
Cathepsin F	Q9UBX1
Cation-independent mannose-6-phosphate receptor	P11717
CD109 antigen	Q6YHK3
CD177 antigen	Q8N6Q3
CD209 antigen	Q9NNX6
CD97 antigen	P48960
CD99 antigen-like protein 2	Q8TC22
Cell adhesion molecule-related/down-regulated by oncogenes	Q4KMG0
CMRF35-like molecule 9	Q6UXG3
Cochlin	O43405
Collectin-12	Q5KU26
Contactin-4	Q8IWW2
Corticotropin-releasing factor-binding protein	P24387
Cystatin-M	Q15828
Cysteine-rich motor neuron 1 protein	Q9NZV1
Cysteine-rich with EGF-like domain protein 2	Q6UXH1
Cytosolic phospholipase A2	P47712
Desmocollin-2	Q02487
Dickkopf-related protein 3	Q9UBP4
Dystroglycan	Q14118
Early activation antigen CD69	Q07108
Ectonucleotide pyrophosphatase/phosphodiesterase family member 2	Q13822
Endothelial cell-selective adhesion molecule	Q96AP7
Fc receptor-like protein 5	Q96RD9
Flavin reductase	P30043
Follistatin-related protein 3	Q95633
Galactoside 3(4)-L-fucosyltransferase, Alpha-(1,3)-fucosyltransferase 5	Q11128, P21217
Glycoprotein hormones alpha chain	P01215
Glycoprotein Xg	P55808
Hepatitis A virus cellular receptor 2	Q8TDQ0

Target	Uniprot No.
HLA class II histocompatibility antigen gamma chain	P04233
Inactive serine protease PAMR1	Q6UXH9
Inhibin beta C chain	P55103
Integrin alpha-5	P08648
Integrin beta-1	P05556
Interleukin-13 receptor subunit alpha-1	P78552
Kunitz-type protease inhibitor 1	O43278
Kunitz-type protease inhibitor 2	Q43291
Lactadherin	Q08431
Laminin subunit alpha-4	Q16363
LDLR chaperone MESD	Q14696
Legumain	Q99538
Leukocyte-associated immunoglobulin-like receptor 1	Q6GTX8
Low affinity immunoglobulin epsilon Fc receptor	P06734
Lymphocyte function-associated antigen 3	P19256
Macrophage migration inhibitory factor	P14174
Matrilin-2	O00339
Myocilin	Q99972
Nidogen-2	Q14112
Osteomodulin	Q99983
Paired immunoglobulin-like type 2 receptor alpha	Q9UKJ1
Peptidyl-prolyl cis-trans isomerase B	P23284
Phosphatidylethanolamine-binding protein 1	P30086
Platelet endothelial aggregation receptor 1	Q5VY43
Platelet-derived growth factor receptor beta	P09619
Protein deglycase DJ-1	Q99497
Protein disulfide-isomerase	P07237
Protein NOV homolog	P48745
Receptor-type tyrosine-protein phosphatase F	P10586
Roundabout homolog 1	Q9Y6N7
Scavenger receptor class F member 1	Q14162
Secretoglobulin family 3A member 1	Q96QR1
Semaphorin-7A	O75326
Serine protease HTRA2, mitochondrial	Q43464
Serine protease inhibitor Kazal-type 1	P00995
Serine protease inhibitor Kazal-type 5	Q9NQ38
Signal-regulatory protein beta-1	O00241
Stress-induced-phosphoprotein 1	P31948
Synaptosomal-associated protein 29	O95721
Thymosin beta-10	P63313
Tissue alpha-L-fucosidase	P04066
Tripeptidyl-peptidase 1	O14773
Tumor necrosis factor receptor superfamily member 19L	Q46924
Tyrosine-protein phosphatase non-receptor type 6	P29350
V-set and immunoglobulin domain-containing protein 4	Q9Y279
WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein 2	Q8TEU8

Olink Target 96 Metabolism細胞代謝、細胞表面受容体シグナル伝達、リン酸化、細胞接着などのプロセスに関与するタンパク質が対象。

Target	Uniprot No.
Adenosylhomocysteinase (AdoHcyase)	P23526
Adhesion G protein-coupled receptor E2	Q9UHX3
Adhesion G-protein coupled receptor G2	Q8IZP9
Amyloid-like protein 1 (APLP)	P51693
Angiopoietin-2 (ANG-2)	O15123
Angiopoietin-related protein 1	Q95841
Angiopoietin-related protein 7	O43827
Annexin A11	P50995
Annexin A4	P09525
Appetite-regulating hormone	Q9UBU3
Arginase-1	P05089
Aromatic-L-amino-acid decarboxylase (AADC)	P20711
B-cell antigen receptor complex-associated protein beta chain	P40259
Cadherin-2	P19022
Cadherin-related family member 5	Q9HBB8
Calsyntenin-2	Q9H4D0
Carbonic anhydrase 13	Q8N1Q1
Catechol O-methyltransferase	P21964
Cathepsin O	P43234
CD2-associated protein	Q9Y5K6
Chordin-like protein 2	Q6WN34
Clusterin-like protein 1	Q15846
Coiled-coil domain-containing protein 80	Q76M96
Crk-like protein	P46109
C-type lectin domain family 5 member A	Q9NY25
CXADR-like membrane protein	Q9H6B4
Diablo homolog, mitochondrial	Q9NR28
Dihydropteridine reductase	P09417
Dipeptidyl peptidase 2	Q9UHL4
Disabled homolog 2	P98082
DNA-(apurinic or apyrimidinic site) lyase	P27695
Ectonucleoside triphosphate diphosphohydrolase 5 (NTPDase 5)	O75356
Ectonucleotide pyrophosphatase/phosphodiesterase family member 7 (E-NPP 7)	Q6UWV6
Eosinophil cationic protein (ECP)	P12724
Fc receptor-like protein 1 (FcR-like protein 1)	Q96LA6
Fructose-1,6-bisphosphatase 1 (FBPase 1)	P09467
Galanin peptides	P22466
Gamma-enolase	P09104
Glutaredoxin-1	P35754
GRB2-related adapter protein 2	O75791
Hepatoma-derived growth factor (HDGF)	P51858
Inactive tyrosine-protein kinase transmembrane receptor ROR1	Q01973
Insulin-like growth factor-binding protein-like 1	Q8WX77
Integrin beta-7	P26010
Kallikrein-10	O43240
Kynurenine--oxoglutarate transaminase 1	Q16773

Target	Uniprot No.
Large proline-rich protein BAG6	P46379
Leucine-rich repeats and immunoglobulin-like domains protein 1 (LIG-1)	Q96JA1
Leukocyte immunoglobulin-like receptor subfamily A member 5	A6N173
Low-density lipoprotein receptor-related protein 11 (LRP-11)	Q86VZ4
Lysophosphatidic acid phosphatase type 6	Q9NPHO
Meprin A subunit beta	Q16820
Meteorin-like protein	Q641Q3
Multiple coagulation factor deficiency protein 2	Q8NI22
NAD kinase	O95544
Nectin-2	Q92692
Neural proliferation differentiation and control protein 1 (NPDC-1)	Q9NQX5
Neuronal pentraxin receptor	O95502
Nodal modulator 1	Q15155
N-terminal prohormone of brain natriuretic peptide	NA
Paired immunoglobulin-like type 2 receptor beta	Q9UKJ0
Peptidyl-prolyl cis-trans isomerase FKBP4 (PPlase FKBP4)	Q02790
Phosphoprotein associated with glycosphingolipid-enriched microdomains 1	Q9NWX8
Pro-cathepsin H	Q09668
Protein FAM3C	Q92520
Protein phosphatase inhibitor 2 (IPP-2)	P41236
Protein S100-P	P25815
Regenerating islet-derived protein 4 (REG-4)	Q9BYZ8
Reticulon-4 receptor	Q9BZR6
Retinal dehydrogenase 1 (RALDH 1)	P00352
Ribosyldihydrocinotinamide dehydrogenase [quinone]	P16083
Scavenger receptor cysteine-rich domain-containing group B protein	Q8WTU2
Sclerostin	Q9QB84
Semaphorin-3F	Q13275
Serpin B6	P35237
Serpin B8	P50452
Sialic acid-binding Ig-like lectin 7 (Siglec-7)	Q9Y286
Sialomucin core protein 24 (MUC-24)	Q04900
Soluble calcium-activated nucleotidase 1 (SCAN-1)	Q8WWQ1
Sulfatase-modifying factor 2	Q8NBJ7
Synaptosomal-associated protein 23 (SNAP-23)	O00161
Syndecan-4 (SYND4)	P31431
T-cell surface glycoprotein CD1c	P29017
Thimet oligopeptidase	P52888
Thioredoxin domain-containing protein 5	Q8NB59
Thymidine phosphorylase (TP)	P19971
Thyrotropin subunit beta	P01222
Trefoil factor 2	Q03403
Tubulointerstitial nephritis antigen-like	Q9GZM7
Tyrosine-protein kinase receptor TYRO3	Q06418
Ubiquitin carboxyl-terminal hydrolase 8	P40818
Versican core protein	P13611

Olink Target 96 Organ Damage ストレス応答、細胞増殖調節、細胞周期、細胞死 / アポトーシスなどのプロセスに関与するタンパク質が対象。

Target	Uniprot No.
[Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 1, mitochondrial (PDP 1)	Q9P0J1
5'-AMP-activated protein kinase subunit beta-1 (AMPK subunit beta-1)	Q9Y478
Adhesion G-protein coupled receptor G1	Q9Y653
Aldehyde dehydrogenase, dimeric NADP-preferring	P30838
Anterior gradient protein 2 homolog (AG-2)	Q95994
Apoptosis-inducing factor 1, mitochondrial	Q95831
B-cell scaffold protein with ankyrin repeats	Q8NDB2
BH3-interacting domain death agonist	P55957
BMP and activin membrane-bound inhibitor homolog	Q13145
C-type lectin domain family 1 member A	Q8NC01
C-type natriuretic peptide	P23582
Calcitonin	P01258
Calreticulin	P27797
Carbonic anhydrase 12	O43570
Carbonic anhydrase 14	Q9ULX7
Casein kinase I isoform delta (CKI-delta)	P48730
Caspin (hCaspin)	Q9HAW4
CMP-N-acetylneuraminic-beta-galactoside-alpha-2,3-sialyltransferase 1 (Alpha 2,3-ST 1)	Q11201
Cocaine esterase	O00748
Contactin-2	Q02246
Corticoliberin	P06850
Desmoglein-4	Q865J6
Dipeptidyl aminopeptidase-like protein 6	P42658
DNA topoisomerase 2-beta	Q02880
Ectonucleoside triphosphate diphosphohydrolase 2 (NTPDase 2)	Q9Y5L3
Ectonucleoside triphosphate diphosphohydrolase 6 (NTPDase 6)	O75354
EGF-like repeat and discoidin I-like domain-containing protein 3	O43854
Enteropeptidase	P98073
Epidermal growth factor-like protein 7 (EGF-like protein 7)	Q9UHF1
Erythropoietin	P01588
Fatty acid-binding protein 9	Q0Z758
Forkhead box protein O1	Q12778
Fructose-2,6-bisphosphatase TIGAR	Q9NQ88
Hematopoietic prostaglandin D synthase (H-PGDS)	O60760
Hepatitis A virus cellular receptor 1 (HAVcr-1)	Q96D42
Inactive tyrosine-protein kinase 7	Q13308
Integrin beta-1-binding protein 1	O14713
Interferon-inducible double-stranded RNA-dependent protein kinase activator A	O75569
Killer cell immunoglobulin-like receptor 3DL1	P43629
Leukotriene A-4 hydrolase (LTA-4 hydrolase)	P09960
Linker for activation of T-cells family member 2	Q9GZY6
Lutropin subunit beta (Lutropin beta chain)	P01229
Macrophage erythroblast attacher	Q7L5Y9
Macrophage-capping protein	P40121
Melanoma-associated antigen D1	Q9Y5V3
Methionine aminopeptidase 1 (MAP 1)	P53582

Target	Uniprot No.
Mevalonate kinase (MK)	Q03426
Mitogen-activated protein kinase kinase kinase 5	Q9Y4K4
Mothers against decapentaplegic homolog 1 (MAD homolog 1)	Q15797
NAD-dependent protein deacylase sirtuin-5, mitochondrial	Q9NXA8
NEDD8 ultimate buster 1	Q9Y5A7
Neutrophil cytosol factor 2 (NCF-2)	P19878
Nibrin	O60934
Nitric oxide synthase, endothelial	P29474
Nucleobindin-2	P80303
Parvalbumin alpha	P20472
Paxillin	P49023
Peptidyl-prolyl cis-trans isomerase FKBP1B (PPIase FKBP1B)	P68106
Perilipin-1	O60240
Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2	O15357
Placenta growth factor (PIGF)	P49763-3
Platelet-derived growth factor C (PDGF-C)	Q9NRA1
Pleiotrophin (PTN)	P21246
Plexin domain-containing protein 1	Q8IUU5
Polypeptide N-acetylgalactosaminyltransferase 10	Q865R1
Probetacellulin	P35070
Programmed cell death protein 1 (Protein PD-1)	Q15116
Prolow-density lipoprotein receptor-related protein 1 (LRP-1)	Q07954
Proteasome subunit alpha type-1	P25786
Protein amnionless	Q9BXJ7
Protein enabled homolog	Q8N8S7
Protein fosB	P53539
Protein LAP2	Q96RT1
Protein max	P61244
Protein phosphatase 1B	O75688
Ras association domain-containing protein 2	P50749
Ras GTPase-activating protein 1 (GAP)	P20936
Receptor-type tyrosine-protein phosphatase eta (Protein-tyrosine phosphatase eta)	Q12913
Renin receptor	O75787
REST corepressor 1	Q9UKL0
Retinoic acid receptor responder protein 1	P49788
Ribonucleoside-diphosphate reductase subunit M2 B	Q7LG56
Serpin A9	Q86WD7
Serum paraoxonase/arylesterase 2 (PON 2)	Q15165
Syntaxin-8	Q9UNK0
Syntaxin-binding protein 3	O00186
Troponin I, cardiac muscle	P19429
Tyrosine-protein kinase Fes/Fps	P07332
Tyrosine-protein kinase Fgr	P09769
Tyrosine-protein kinase Yes	P07947
Vasohibin-1	Q7L8A9
Wiskott-Aldrich syndrome protein (WASp)	P42768

マウス用パネル

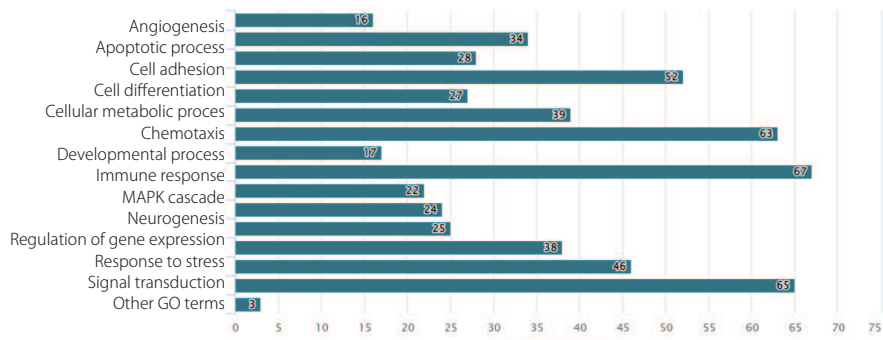
Olink Target 96 Mouse Exploratory

Target	Uniprot No.
Amyloid beta A4 precursor protein-binding family B member 1-interacting protein (Apbb1ip)	Q8R5A3
Appetite-regulating hormone (Ghrl)	Q9EQX0
Aryl hydrocarbon receptor (Ahr)	P30561
Axin-1 (Axin1)	Q35625
C-C motif chemokine 2 (Ccl2)	P10148
C-C motif chemokine 20 (Ccl20)	O89093
C-C motif chemokine 3 (Ccl3)	P10855
C-C motif chemokine 5 (Ccl5)	P30882
C-X-C motif chemokine 9 (Cxcl9)	P18340
Cadherin-6 (Cdh6)	P97326
Calsyntenin-2 (Clstn2)	Q9ER65
Carbonic anhydrase 13 (Ca13)	Q9D6N1
Carboxypeptidase E (Cpe)	Q00493
Caspase-3 (Casp3)	P70677
Contactin-1 (Cntn1)	P12960
Contactin-4 (Cntn4)	Q69Z26
CXADR-like membrane protein (Clmp)	Q8R373
Cysteine-rich motor neuron 1 protein (Crim1)	Q9JLL0
Cytosolic phospholipase A2 (Pla2g4a)	P47713
Delta-like protein 1 (Dll1)	Q61483
Dihydropteridine reductase (Qdpr)	Q8BV14
Disintegrin and metalloproteinase domain-containing protein 23 (Adam23)	Q9R1V7
Dual specificity mitogen-activated protein kinase kinase 6 (Map2k6)	P70236
Dynactin subunit 2 (Dctn2)	Q99KJ8
Epithelial cell adhesion molecule (Epcam)	Q99JW5
Erythropoietin (Epo)	P07321
Follistatin (Fst)	P47931
Follistatin-related protein 3 (Fstl3)	Q9EQC7
Forkhead box protein O1 (Foxo1)	Q9R1E0
Friend leukemia integration 1 transcription factor (Fli1)	P26323
Platelet-derived growth factor subunit B (Pdgfb)	P31240
Plexin-A4 (PlxnA4)	Q80UG2
Poly [ADP-ribose] polymerase 1 (Parp1)	P11103
Protein CYR61 (Cyr61)	P18406
Protein delta homolog 1 (Dlk1)	Q09163
Protein phosphatase inhibitor 2 (Ppp1r2)	Q9DCL8
Protein S100-A4 (S100a4)	P07091
Protransforming growth factor alpha (Tgfa)	P48030
Receptor tyrosine-protein kinase erbB-4 (ErbB4)	Q61527
Repulsive guidance molecule A (Rgma)	Q6PCX7
Ribosomal oxygenase 2 (Riox2)	Q8CD15
Seizure 6-like protein 2 (Sez6l2)	Q4V9Z5
Serine/threonine-protein kinase PAK 4 (Pak4)	Q8BTW9
Serine/threonine-protein kinase receptor R3 (Acvrl1)	Q61288
Soluble calcium-activated nucleotidase 1 (Cant1)	Q8VCF1
Synaptosomal-associated protein 29 (Snap29)	Q9ERB0

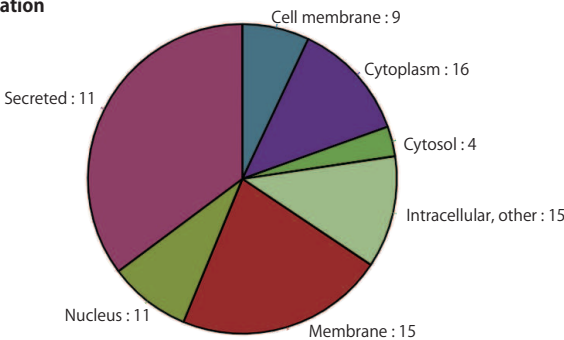
Target	Uniprot No.
Gamma-enolase (Eno2)	P17183
GNDF family receptor alpha-1 (Gfra1)	P97785
Glial cell line-derived neurotrophic factor (Gdnf)	P48540
Glucagon (Gcg)	P55095
Granulocyte-macrophage colony-stimulating factor (Csf2)	P01587
Growth-regulated alpha protein (Cxcl1)	P12850
Hepatocyte growth factor (Hgf)	Q08048
Immunoglobulin superfamily member 3 (Igsf3)	Q6ZQA6
Integrin beta-1-binding protein 2 (Itgb1bp2)	Q9R000
Integrin beta-6 (Itgb6)	Q9Z0T9
Interleukin-1 alpha (Il1a)	P01582
Interleukin-1 beta (Il1b)	P10749
Interleukin-10 (Il10)	P18893
Interleukin-17A (Il17a)	Q62386
Interleukin-17F (Il17f)	Q7TNI7
Interleukin-23 receptor (Il23r)	Q8K4B4
Interleukin-5 (Il5)	P04401
Interleukin-6 (Il6)	P08505
Kit ligand (Kitlg)	P20826
Legumain (Lgmn)	O89017
Leucine-rich repeat transmembrane protein FLRT2 (Flrt2)	Q8BLU0
Lipoprotein lipase (Lpl)	P11152
Matrilin-2 (Matn2)	O08746
Melanoma-derived growth regulatory protein (Mia)	Q61865
N(G),N(G)-dimethylarginine dimethylaminohydrolase 1 (Ddah1)	Q9CWS0
NAD kinase (Nadk)	P58058
Neurogenic locus notch homolog protein 3 (Notch3)	Q61982
Neurotrophin-3 (Ntf3)	P20181
Perilipin-1 (Plin1)	Q8CGN5
Peroxiredoxin-5, mitochondrial (Prdx5)	P99029
Tenascin-R (Tnr)	Q8BY19
Transforming growth factor beta receptor type 3 (Tgfb3)	O88393
Latency-associated peptide transforming growth factor beta-1 (Tgfb1)	P04202
Tripeptidyl-peptidase 1 (Tpp1)	O89023
Troponin I, cardiac muscle (Tnni3)	P48787
Tumor necrosis factor (Tnf)	P06804
Tumor necrosis factor ligand superfamily member 12 (Tnfsf12)	O54907
Tumor necrosis factor receptor superfamily member 11B (Tnfrsf11b)	O08712
Tumor necrosis factor receptor superfamily member 12A (Tnfrsf12a)	Q9CR75
Tumor necrosis factor receptor superfamily member 27 (Eda2r)	Q8BX35
Tumor necrosis factor receptor superfamily member 6 (Fas)	P25446
Tyrosine-protein kinase Yes (Yes1)	Q04736
V-set and immunoglobulin domain-containing protein 2 (Vsig2)	Q9Z109
Vascular endothelial growth factor D (Vegfd)	P97946
WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein 2 (Wfknk2)	Q7TQN3
WNT1-inducible-signaling pathway protein 1 (Wisp1)	O54775

本パネルで分析対象となっているタンパク質 92 種類の GO 情報に基づく分類

Biological Process



Subcellular Location



Olink Target 48 Cytokine 受託サービス

サイトカイン研究および炎症関連疾患の究極のソリューション。

一度の分析でサイトカイン シグナル伝達関連など、45 のタンパク質の絶対定量値が得られます。

- 検量線に基づく標準濃度単位 (pg/mL) での絶対定量。
- 炎症性疾患の研究や多くの疾患の根底にある “炎症プロセス” 研究で関連性の高い 45 種 (※) を厳選。
- 1 つのパネルにつき、最大 40 サンプルの測定が可能。
- 血清・血漿・脳脊髄液、唾液など幅広いサンプル種に対応。
- 必要なサンプル量は 血漿の場合 1uL

※ 45 タンパク質のうち、35 は、Target 96 inflammation に含まれているものです。

血清・血漿

(その他のサンプルについてはお問合せください)



48 サンプル

└ 40 サンプル

└ 8 コントロール



48 アッセイ

└ 45 ターゲット

└ 3 QC 用

40 検体を同時測定し、
45 の対象タンパク質についての『定量値 (pg/ml)』算出。

仕 様

▶ 必要サンプル量

血清・血漿 20uL 以上をご提供ください。

▶ 納期

分析サンプルをお受け取りした日から1.5~2ヶ月程度

▶ サービス内容

- ・サンプル前処理
 - └ 96ウェルフォーマットへの分注作業
 - └ サンプルランダムマイゼーション
- ・Olink Target 48 分析
- ・専用ソフトウェアでの一次解析

▶ 納品物

- ・報告書
- ・データ (エクセルファイル形式)

▶ 価格

基本料金 ¥ 500,000 (税別) / パネル

分析単価 ¥ 20,000 (税別) / 検体

例) 2群 × 各 n=15 の場合

¥ 500,000 + ¥ 20,000 × 30 = ¥ 1,100,000

- ・多検体の場合、割引適応あり
- ・弊社 (国内拠点) での分析のため、サンプル輸送費は~2,000円程度です。
一般の宅配【冷凍便・ドライアイス梱包】でお送りください。
- ・分析遂行の最小検体数は20検体以上とさせて頂いております。
20検体以上未満でご依頼の場合には、別のユーザー様案件とのパネルシェアをお待ち頂く、または、20検体分の費用をご負担いただく事をお願いいたします。

★ 詳しくはお問合せください！

Olink Target 48 Cytokine

炎症性疾患の研究や、多くの疾患の根底にある炎症プロセスに関連のあるターゲットで構成されたパネル

Cytokines

Target	Uniprot No.
Fms-related tyrosine kinase 3 ligand (FLT3LG)	P49771
Granulocyte colony-stimulating factor (CSF3)	P09919
Granulocyte-macrophage colony-stimulating factor (CSF2)	P04141
Interferon gamma (IFNG)	P01579
Interleukin-1 beta (IL1B)	P01584
Interleukin-2 (IL2)	P60568
Interleukin-4 (IL4)	P05112
Interleukin-6 (IL6)	P05231
Interleukin-7 (IL7)	P13232
Interleukin-8 (CXCL8)	P10145
Interleukin-10 (IL10)	P22301
Interleukin-13 (IL13)	P35225
Interleukin-15 (IL15)	P40933
Interleukin-17A (IL17A)	Q16552
Interleukin-17C (IL17C)	Q9P0M4
Interleukin-17F (IL17F)	Q96PD4
Interleukin-18 (IL18)	Q14116
Interleukin-27 (IL27)	Q8NEV9,Q14213
Interleukin-33 (IL33)	O95760
Lymphotoxin-alpha (LTA)	P01374
Macrophage colony-stimulating factor 1 (CSF1)	P09603
Oncostatin-M (OSM)	P13725
Tumor necrosis factor (TNF)	P01375
Tumor necrosis factor ligand superfamily member 10 (TNFSF10)	P50591
Thymic stromal lymphopoietin (TSLP)	Q969D9
Tumor necrosis factor ligand superfamily member 12 (TNFSF12)	O43508

Chemokines

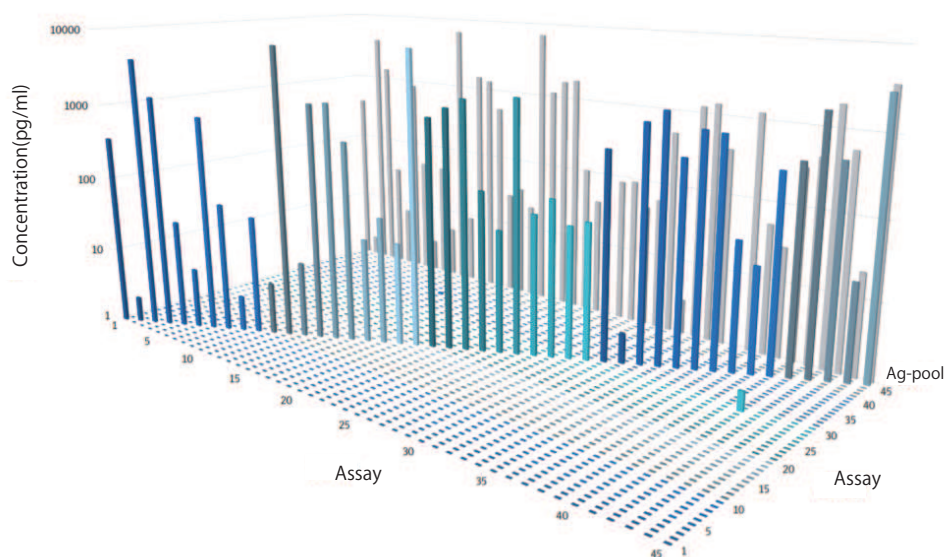
Target	Uniprot No.
C-C motif chemokine 2 (CCL2)	P13500
C-C motif chemokine 3 (CCL3)	P10147
C-C motif chemokine 4 (CCL4)	P13236
C-C motif chemokine 7 (CCL7)	P80098
C-C motif chemokine 8 (CCL8)	P80075
C-C motif chemokine 13 (CCL13)	Q99616
C-C motif chemokine 19 (CCL19)	Q99731
C-X-C motif chemokine 9 (CXCL9)	Q07325
C-X-C motif chemokine 10 (CXCL10)	P02778
C-X-C motif chemokine 11 (CXCL11)	Q14625
Eotaxin (CCL11)	P51671
Stromal cell-derived factor 1 (CXCL12)	P48061

Other

Target	Uniprot No.
Hepatocyte growth factor (HGF)	P14210
Interstitial collagenase (MMP1)	P03956
Macrophage metalloelastase (MMP12)	P39900
Oxidized low-density lipoprotein receptor 1 (OLR1)	P78380
Pro-epidermal growth factor (EGF)	P01133
Protransforming growth factor alpha (TGFA)	P01135
Vascular endothelial growth factor A (VEGFA)	P15692

□ 特異性の高いアッセイ

下記の図は、Olink Target 48 Cytokine の抗体が目的のターゲットタンパク質に特異的であることをテストした結果です。45 個のターゲットタンパク質（リコンビナントタンパク質）に対し、すべての組み合わせでアッセイを実施しています。対角線上に数値の上昇が見られますが、これは、それぞれがターゲットのみを特異性高く認識していることを示しています。なお、図中の Ag-pool は、ポジティブコントロールで、すべてのタンパク質が検出されるサンプルです。



Olink® Target 受託サービス お問合せ

専用お問合せフォームからご検討内容をお知らせください。
営業担当または分析担当者より連絡させていただきます。



株式会社ファーマフーズ アプロサイエンスグループ

〒770-0865 徳島県徳島市南末広町4-53 エコービル4階

■Tel: 088-678-6372 ■Mail: bio@apro-s.com

■Url: <https://apro-s.com/>

本社 〒615-8245 京都府京都市西京区御陵大原1-49

販売店

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