



## Protein assay list

# Olink® Flex

Product number: 93300

Key - Disease Area

CVD	
Immuno-oncology	
Inflammation	
Neurology	
Oncology	

## Cytokines

\* Assays unique for Olink in the midplex protein biomarker field












Cytokine receptor common subunit beta*	CSF2RB (IL3RB, IL5RB)	P32927	
Fms-related tyrosine kinase 3 ligand	FLT3LG	P49771	
Granulocyte colony-stimulating factor	CSF3 (C17orf33, GCSF)	P09919	
Granulocyte colony-stimulating factor receptor*	CSF3R (GCSFR)	Q99062	
Granulocyte-macrophage colony-stimulating factor	CSF2 (GMCSF)	P04141	
Interferon alpha-2	IFNA2 (IFNA2A, IFNA2B, IFNA2C)	P01563	
Interferon beta	IFNB1 (IFB, IFNB)	P01574	
Interferon gamma	IFNG	P01579	
Interferon lambda receptor 1*	IFNLR1 (IL28RA, LICR2)	Q8IU57	
Interferon lambda-1	IFNL1 (IL29, ZCYTO21)	Q8IU54	
Interleukin-1 alpha	IL1A (IL1F1)	P01583	
Interleukin-1 beta	IL1B (IL1F2)	P01584	
Interleukin-1 receptor antagonist protein	IL1RN (IL1F3, IL1RA)	P18510	
Interleukin-1 receptor-associated kinase 4*	IRAK4	Q9NWZ3	
Interleukin-2	IL2	P60568	
Interleukin-3	IL3	P08700	
Interleukin-4	IL4	P05112	
Interleukin-4 receptor subunit alpha	IL4R (IL4RA)	P24394	
Interleukin-5	IL5	P05113	
Interleukin-5 receptor subunit alpha*	IL5RA (IL5R)	Q01344	
Interleukin-6	IL6 (IFNB2)	P05231	
Interleukin-7	IL7	P13232	
Interleukin-10	IL10	P22301	
Interleukin-11	IL11	P20809	
Interleukin-12 p70	IL12 (IL12A, IL12B, NKSF1, NKSF2)	P29459_ P29460	
Interleukin-13	IL13 (NC30)	P35225	
Interleukin-15	IL15	P40933	

Interleukin-17A	IL17A (CTLA8, IL17)	Q16552	●
Interleukin-17C	IL17C	Q9P0M4	●
Interleukin-17D	IL17D	Q8TAD2	●●
Interleukin-17F	IL17F	Q96PD4	●●
Interleukin-18	IL18 (IGIF, IL1F4)	Q14116	●●●
Interleukin-18 receptor 1*	IL18R1 (IL1RRP)	Q13478	●●
Interleukin-19	IL19 (ZMDA1)	Q9UHD0	●
Interleukin-20	IL20 (ZCYTO10)	Q9NYY1	●
Interleukin-25	IL25 (IL17E)	Q9H293	●
Interleukin-27	IL27 (IL27A, IL27B, EB13)	Q14213_ Q8NEV9	●●
Interleukin-31 receptor subunit alpha*	IL31RA (CRL3, GPL)	Q8NI17	
Interleukin-32	IL32 (NK4, TAIF)	P24001	●●●
Interleukin-33	IL33 (C9orf26, IL1F11, NFHEV)	O95760	●●●
Leukemia inhibitory factor	LIF (HILDA)	P15018	●●●
Leukemia inhibitory factor receptor*	LIFR (CD118)	P42702	●●●
Lymphotoxin-alpha	LTA (TNFB, TNFSF1)	P01374	●●
Macrophage colony-stimulating factor 1	CSF1 (M-CSF)	P09603	●●●
Oncostatin-M	OSM	P13725	●●●
Pro-interleukin-16	IL16	Q14005	●●
Thymic stromal lymphopoietin	TSLP	Q969D9	●
Tumor necrosis factor	TNF (TNFA, TNFSF2)	P01375	●●●
Tumor necrosis factor ligand superfamily member 6	FASLG (APT1LG1, CD95L, FASL, TNFSF6)	P48023	●
Tumor necrosis factor ligand superfamily member 10	TNFSF10 (APO2L, TRAIL)	P50591	●●
Tumor necrosis factor ligand superfamily member 11	TNFSF11 (OPGL, RANKL, TRANCE)	O14788	●
Tumor necrosis factor ligand superfamily member 12	TNFSF12 (APO3L, DR3LG, TWEAK)	O43508	●●●
Tumor necrosis factor ligand superfamily member 13	TNFSF13 (APRIL, TALL2, ZTNF2)	O75888	●
Tumor necrosis factor ligand superfamily member 14	TNFSF14 (HVEM, LIGHT)	O43557	●●●
Tumor necrosis factor receptor superfamily member 4	TNFRSF4 (TXGP1L, CD134, OX40)	P43489	●
Tumor necrosis factor receptor superfamily member 9	TNFRSF9 (CD137, ILA)	Q07011	●●
Tumor necrosis factor receptor superfamily member 11A*	TNFRSF11A (RANK)	Q9Y6Q6	
Tumor necrosis factor receptor superfamily member 11B	TNFRSF11B (OCIF, OPG)	O00300	●●●
Tumor necrosis factor receptor superfamily member 13B	TNFRSF13B (TACI)	O14836	●●
Tumor necrosis factor receptor superfamily member 13C	TNFRSF13C (BAFFR, BR3)	Q96RJ3	●●
Tumor necrosis factor receptor superfamily member EDAR*	EDAR (DL)	Q9UNE0	●



















# Chemokines

C-C motif chemokine 2	CCL2 (MCP1, SCYA2)	P13500	
C-C motif chemokine 3	CCL3 (G0S19-1, MIP1A, SCYA3)	P10147	
C-C motif chemokine 4	CCL4 (LAG1, MIP1B, SCYA4)	P13236	
C-C motif chemokine 7	CCL7 (MCP3, SCYA6, SCYA7)	P80098	
C-C motif chemokine 8	CCL8 (MCP2, SCYA10, SCYA8)	P80075	
C-C motif chemokine 13	CCL13 (MCP4, NCC1, SCYA13)	Q99616	
C-C motif chemokine 17	CCL17 (SCYA17, TARC)	Q92583	
C-C motif chemokine 19	CCL19 (ELC, MIP3B, SCYA19)	Q99731	
C-C motif chemokine 20	CCL20 (LARC, MIP3A, SCYA20)	P78556	
C-C motif chemokine 21	CCL21 (SCYA21)	O00585	
C-C motif chemokine 25	CCL25 (SCYA25, TECK)	O15444	
C-C motif chemokine 26	CCL26 (SCYA26)	Q9Y258	
C-C motif chemokine 28	CCL28 (SCYA28, MEC)	Q9NRJ3	
C-X-C motif chemokine 5	CXCL5 (ENA78, SCYB5)	P42830	
C-X-C motif chemokine 6	CXCL6 (GCP2, SCYB6)	P80162	
C-X-C motif chemokine 9	CXCL9 (CMK, MIG, SCYB9)	Q07325	
C-X-C motif chemokine 10	CXCL10 (INP10, SCYB10, IP-10)	P02778	
C-X-C motif chemokine 11	CXCL11 (ITAC, SCYB11, SCYB9B)	O14625	
C-X-C motif chemokine 13	CXCL13 (BCA1, BLC, SCYB13)	O43927	
C-X-C motif chemokine 17*	CXCL17 (VCC1)	Q6UXB2	
Eotaxin	CCL11 (SCYA11)	P51671	
Growth-regulated alpha protein	CXCL1 (GRO, GRO1, GROA, MGSA, SCYB1)	P09341	
Interleukin-8	CXCL8 (IL8)	P10145	
Stromal cell-derived factor 1	CXCL12 (SDF1, SDF1A, SDF1B)	P48061	

# Growth factors

Fibroblast growth factor 2	FGF2 (FGFB)	P09038	
Fibroblast growth factor 5*	FGF5	P12034	
Fibroblast growth factor 21	FGF21	Q9NSA1	
Fibroblast growth factor 23	FGF23 (HYPF)	Q9GZV9	
Growth/differentiation factor 2	GDF2 (BMP9)	Q9UK05	
Hepatocyte growth factor	HGF (HPTA)	P14210	
Placenta growth factor	PGF (PGFL, PLGF)	P49763	
Pro-epidermal growth factor	EGF	P01133	
Proheparin-binding EGF-like growth factor	HBEGF (DTR, DTS, HEGFL)	Q99075	
Protransforming growth factor alpha	TGFA	P01135	
Transforming growth factor beta-1 proprotein	TGFB1 (TGFB)	P01137	
Vascular endothelial growth factor A	VEGFA (VEGF)	P15692	
Vascular endothelial growth factor D	VEGFD (FIGF)	O43915	
Vascular endothelial growth factor receptor 2	KDR (FLK1, VEGFR2)	P35968	




















# Enzymes

11-beta-hydroxysteroid dehydrogenase 1*	HSD11B1 (HSD11, HSD11L, SDR26C1)	P28845	
Adenosine deaminase*	ADA (ADA1)	P00813	
Caspase-8	CASP8 (MCH5)	Q14790	
DNA topoisomerase 2-beta*	TOP2B	Q02880	
E3 ubiquitin-protein ligase XIAP*	XIAP (API3, BIRC4, IAP3)	P98170	
Glutamate carboxypeptidase 2*	FOLH1 (FOLH, NAALAD1, PSM, PSMA)	Q04609	
Granzyme A	GZMA (CTLA3, HFSP)	P12544w	
Granzyme B	GZMB (CGL1, CSPB, CTLA1, GRB)	P10144	
Inactive dipeptidyl peptidase 10*	DPP10 (DPRP3, KIAA1492)	Q8N608	
Interstitial collagenase	MMP1 (CLG)	P03956	
Kynureninase*	KYNU	Q16719	
Macrophage metalloelastase	MMP12 (HME)	P39900	
Matrilysin	MMP7 (MPSL1, PUMP1)	P09237	
Methylated-DNA--protein-cysteine methyltransferase*	MGMT	P16455	
Mitogen-activated protein kinase 9*	MAPK9 (JNK2, PRKM9, SAPK1A)	P45984	
NAD-dependent protein deacetylase sirtuin-2*	SIRT2 (SIR2L, SIR2L2)	Q8IXJ6	
Peroxiredoxin-1	PRDX1 (PAGA, PAGB, TDPX2)	Q06830	
Stromelysin-2	MMP10 (STMY2)	P09238	

## Other

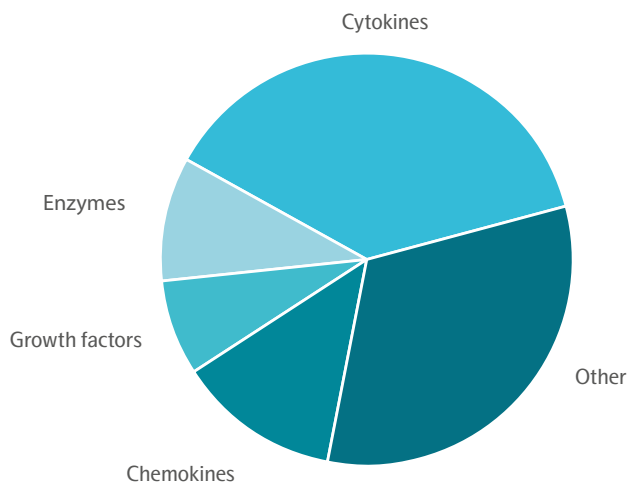
Agouti-related protein	AGRP (AGRT, ART)	O00253	●
Amphiregulin	AREG (AREGB, SDGF, AR)	P15514	●●
Angiopoietin-1	ANGPT1 (KIAA0003, ANG1)	Q15389	●●
Angiopoietin-2	ANGPT2	O15123	●●●
Appetite-regulating hormone	GHRL (MTLRP)	Q9UBU3	
Axin-1*	AXIN1 (AXIN)	O15169	●●
Basigin	BSG (EMMPRIN)	P35613	●
B-cell antigen receptor complex-associated protein beta chain*	CD79B (B29, IGB)	P40259	●
Butyrophilin subfamily 3 member A2*	BTN3A2 (BT3.2, BTF3, BTF4)	P78410	●●●
Cadherin-3*	CDH3 (CDHP)	P22223	●●
Calbindin	CALB1 (CAB27)	P05937	●●
Carcinoembryonic antigen-related cell adhesion molecule 21*	CEACAM21	Q3KPI0	●
Carcinoembryonic antigen-related cell adhesion molecule 5	CEACAM5 (CEA)	P06731	●
CD70 antigen*	CD70 (CD27L, CD27LG, TNFSF7)	P32970	●
CD83 antigen*	CD83	Q01151	●●
CD160 antigen*	CD160 (BY55, NK1)	O95971	●
CD226 antigen	CD226 (DNAM1, PTA1)	Q15762	●
CD276 antigen	CD276 (B7H3)	Q5ZPR3	●●
Cell surface glycoprotein CD200 receptor 1*	CD200R1 (CD200R, CRTR2, MOX2R, OX2R)	Q8TD46	●
CMRF35-like molecule 6*	CD300C (CMRF35, CMRF35A, CMRF35A1, IGSF16, CLM-6)	Q08708	●●
C-type lectin domain family 4 member A*	CLEC4A (CLECSF6, DCIR, LLIR)	Q9UMR7	●
C-type lectin domain family 4 member C*	CLEC4C (BDCA2, CLECSF11, CLECSF7, DLEC, HECL)	CLEC4C	●●
C-type lectin domain family 7 member A*	CLEC7A (BGR, CLECSF12, DECTIN1)	Q9BXN2	●●
CUB domain-containing protein 1*	CDCP1 (TRASK, CD318)	Q9H5V8	●
Cystatin-D*	CST5	P28325	●
Dickkopf-related protein 1	DKK1	O94907	●●●
DNA fragmentation factor subunit alpha*	DFFA (DFF1, DFF45, ICAD)	O00273	●
Egl nine homolog 1*	EGLN1 (C1orf12)	Q9GZT9	●●
Erythropoietin	EPO	P01588	●●●
Eukaryotic translation initiation factor 4E	EIF4E (EIF4EL1, EIF4F)	P06730	

Fc receptor-like protein 2*	FCRL2 (FCRH2, IFGP4, IRTA4, SPAP1)	Q96LA5	
Follistatin	FST (FS)	P19883	
Gastric inhibitory polypeptide	GIP	P09681	
Glial cell line-derived neurotrophic factor	GDNF	P39905	
Hepatitis A virus cellular receptor 1	HAVCR1 (KIM1, TIM1, TIMD1)	Q96D42	
HLA class II histocompatibility antigen, DR alpha chain*	HLA-DRA (HLA-DRA1)	P01903	
Hypoxia-inducible factor 1-alpha	HIF1A (BHLHE78, MOP1, PASD8)	Q16665	
ICOS ligand	ICOSLG (B7H2, B7RP1, ICOSL, KIAA0653)	O75144	
Integrin beta-6*	ITGB6	P18564	
Keratin, type I cytoskeletal 18	KRT18 (CYK18)	P05783	
Kit ligand	KITLG (MGF, SCF)	P21583	
Lymphocyte activation gene 3 protein	LAG3 (FDC)	P18627	
Lymphocyte antigen 75*	LY75 (CD205, CLEC13B)	O60449	
Lysosome-associated membrane glycoprotein 3*	LAMP3 (DCLAMP, TSC403)	Q9UQV4	
Mesothelin	MSLN (MPF)	Q13421	
Natural cytotoxicity triggering receptor 1*	NCR1 (LY94, CD335)	O76036	
Natural cytotoxicity triggering receptor 3 ligand 1	NCR3LG1 (B7H6)	Q68D85	
Natural killer cells antigen CD94*	KLRD1 (CD94)	Q13241	
Nectin-4	NECTIN4 (LNIR, PRR4, PVRL4)	Q96NY8	
NEDD8 ultimate buster 1*	NUB1 (NYREN18)	Q9Y5A7	
Nephrin	NPHS1 (NPHN, CNF)	O60500	
Neurotrophin-3	NTF3 (NT-3)	P20783	
NF-kappa-B essential modulator*	IKBKG (FIP3, NEMO)	Q9Y6K9	
OX-2 membrane glycoprotein*	CD200 (MOX1, MOX2)	P41217	
Oxidized low-density lipoprotein receptor 1	OLR1 (CLEC8A, LOX1)	P78380	
Parathyroid hormone/parathyroid hormone-related peptide receptor*	PTH1R (PTHr, PTHR1)	Q03431	
Pentraxin-related protein PTX3	PTX3 (TNFAIP5, TSG14)	P26022	
Peptide YY	PYY	P10082	
Period circadian protein homolog 3*	PER3	P56645	

Platelet glycoprotein 4	CD36 (GP3B, GP4)	P16671	
Pro-adrenomedullin*	ADM (AM)	P35318	
Pro-glucagon	GCG (GLP1)	P01275	
Programmed cell death 1 ligand 2	PDCD1LG2 (B7DC, CD273, PDCD1L2, PDL2)	Q9BQ51	
Programmed cell death protein 1	PDCD1 (PD1)	Q15116	
Prokineticin-1*	PROK1 (EG-VEGF)	P58294	
Protein HEXIM1*	HEXIM1 (CLP1, EDG1, HIS1, MAQ1)	O94992	
Signaling lymphocytic activation molecule*	SLAMF1 (SLAM)	Q13291	
SLAM family member 5*	CD84 (SLAMF5)	Q9UIB8	
STAM-binding protein*	STAMBP (AMSH)	O95630	
T-cell differentiation antigen*	CD6	P30203	
T-cell surface glycoprotein CD4*	CD4	P01730	
T-cell-specific surface glycoprotein CD28	CD28 (CD283)	P10747	
Thrombopoietin	THPO (MGDF)	P40225	
T-lymphocyte activation antigen	CD80 (CD28LG, CD28LG1, LAB7)	P33681	
Toll-like receptor 1	TLR1 (KIAA0012)	Q15399	
Toll-like receptor 3*	TLR3 (CD283)	O15455	
Transcription factor Jun	JUN	P05412	
Triggering receptor expressed on myeloid cells 2	TREM2	Q9NZC2	
Urokinase plasminogen activator surface receptor	PLAUR (MO3, UPAR)	Q03405	
Visinin-like protein 1*	VSNL1 (VISL1)	P62760	



## Protein Categories



Classification of the Flex library biomarkers based on protein category. Note that cytokine receptors are included in the cytokine category, and that the highlighted categories were selected based on the most frequent protein groups within the Flex library.

For more details on the Flex library, including the panel builder and pathway visualization tools, please visit [insight.olink.com](https://insight.olink.com) and [olink.com/flex](https://olink.com/flex).

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Olink Proteomics, Dag Hammarskjölds väg 52B, SE-752 37 Uppsala, Sweden

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