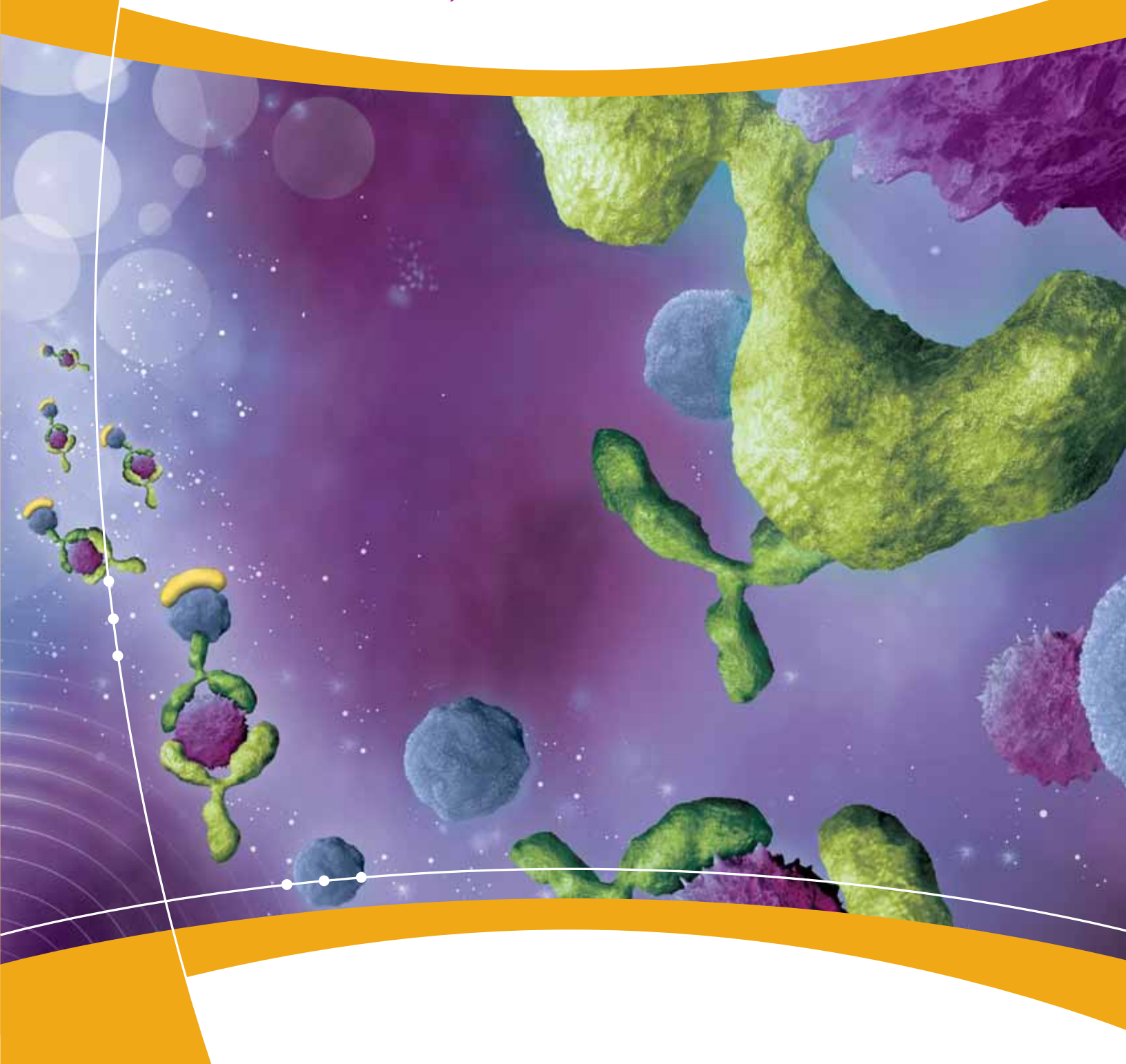




Cytokines and Chemokines

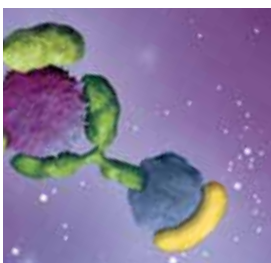
Recombinant Proteins

for Bioassays & ELISA Standards





eBioscience is committed to developing and manufacturing high-quality, innovative reagents in an ISO certified facility. As a provider of more than 10,000 products, we empower our customers worldwide to obtain exceptional results by using reagents that offer a new standard of excellence in the areas of innovation, quality and value.



CYTOKINE AND CHEMOKINE RECOMBINANT PROTEINS

2010 Guide

eBioscience: Discover More

As a scientist, there are many technologies available to you to achieve greater understanding of immune function, disease mechanisms, and cellular development. Techniques such as flow cytometry, immunoassays, bioassays, and microscopy are all powerful tools that can be used individually or in combination to provide complete analysis of a biological question.

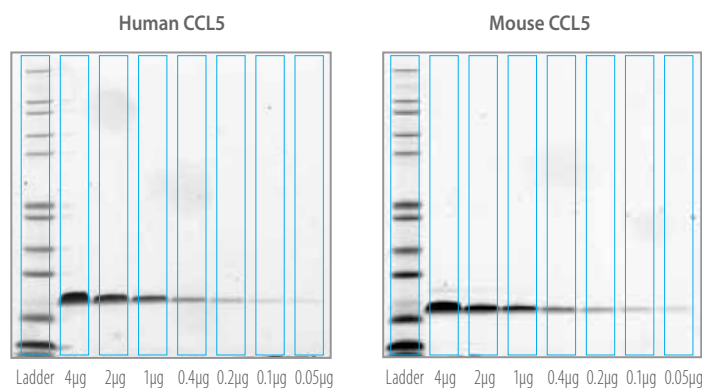
In addition to being a leading provider of high quality, affordable reagents for multicolor flow cytometry, eBioscience is your source for a wide range of high-quality cytokine and chemokine recombinant proteins. eBioscience's recombinant protein portfolio boasts the industry's most demanding quality control and performance criteria including endotoxin levels that are tenfold lower than other suppliers and functional testing to ensure bioactivity or ELISA performance. When used in conjunction with flow cytometry, immunoassays or microscopy, the use of eBioscience recombinant proteins will ensure the quality of biological information you obtain from your research.

QUALITY ASSURANCE

Only eBioscience recombinants meet the following criteria to ensure you are receiving the best protein possible:

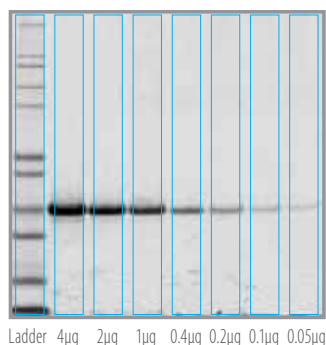
- Endotoxin levels must be < 0.01 ng/ μ g of protein
- Bioactivity analysis in a relevant bioassay
- ELISA performance

Details on specific testing and performance information for each protein are available on-line.



Human and Mouse CCL5 (RANTES): SDS-PAGE gel images showing recombinant protein purity of $>95\%$.

Human FGF-basic



Human FGF-basic: SDS-PAGE gel images showing recombinant protein purity of >95%.

Recombinant Cytokines

PROTEINS FOR BIOASSAY AND ELISA

Cytokines are secreted proteins that play a vital role in immunology. Secreted by a variety of immune cells such as T cells, B cells, macrophages and monocytes, cytokines regulate multiple facets of immunity. Produced in response to a stimulus, cytokines can induce or inhibit cellular proliferation, growth and differentiation, or secretion of other cytokines or chemokines. Understanding cytokine biology provides insight into the regulation of inflammation and autoimmunity, tumor growth and suppression, and many other areas of immunology.

CYTOKINE PRODUCT OFFERING

eBioscience offers a diverse portfolio of human, mouse, and rat cytokines from Interleukins to Interferons that can be used in functional bioassays and immunoassays.

Our products are configured in the following formats:

Purified Proteins – Contain BSA as a stabilizer

- Ideal for use in bioassays and as standards in ELISA applications.
- Available in a range of sizes to accommodate your research scale.

Many proteins available in 5 µg, 10 µg, 25 µg or 50 µg sizes

Carrier-Free Proteins – Do not contain BSA

- Ideal for use in *in vivo* applications or where BSA would interfere with the experiment.
- Carrier-free proteins are available in larger sizes.

100 µg and 500 µg sizes are standard

Bulk Packaging

- Available for all recombinant proteins. Please contact your eBioscience representative for information on availability and volume-based pricing.

HUMAN Purified Recombinant Cytokines (contain BSA)

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
14-8019	IL-1 α	Monocytes, Macrophages, DC, NK, B Cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 20 pg/ml	BA	ELISA
14-8018	IL-1 β	Monocyte, Macrophage, DC, NK, B Cell, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8029	IL-2	Th1	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	
14-8049	IL-4	Th2, NK(T), T Cell, Mast Cell	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8059	IL-5	Th2, Mast Cell	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8069	IL-6	Th2, Monocyte, Macrophage, DC, Bone marrow	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8079	IL-7	Bone marrow, Thymic stroma	Human PBMC PHA-activated proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
14-8089	IL-8	Monocytes, Macrophages, Endothelium	Human peripheral blood neutrophil chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8958	IL-9	Th cells	M07e cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	--
14-8109	IL-10	Th cells, B cells, Monocytes, Macrophages	Mouse MC/9 cell proliferation assay costimulated with IL-4	ED ₅₀ is 1 ng/ml	BA	ELISA
14-8129	IL-12	Monocytes, Macrophages, DC, B cells	Human PBMC PHA-activated proliferation assay	ED ₅₀ is 100 pg/ml	BA	ELISA
14-8139	IL-13	Th2, Mast cell	Human TF-1 cell proliferation assay	ED ₅₀ is 1.0-5.0 ng/ml	BA	ELISA
14-8159	IL-15	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.10 ng/ml	BA	--
14-8169	IL-16	T cells, Monocytes, Eosinophils	Human CD4+ T cell chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8179	IL-17A	Th17	Induction of IL-6 production by NHDF cells	ED ₅₀ is 3 ng/ml	BA	ELISA
14-8178	IL-17A/F	Th17	Induction of IL-6 production by NIH/3T3 cells	ED ₅₀ is 10 ng/ml	BA	ELISA
14-8177	IL-17C	Th17	--	--	--	--
14-8479	IL-17F	Th17	Induction of IL-6 production by NIH/3T3 cells	ED ₅₀ is 500 ng/ml	BA	--
14-8199	IL-19	Monocytes	Induction of IL-6 production by Human PBMCs	ED ₅₀ is 250 - 500 ng/ml	BA	--
14-8219	IL-21	Th cells	Induction of B9 cells proliferation	ED ₅₀ is 10 ng/mL	BA	ELISA
14-8229	IL-22	Th17	Colo205 cells induction of IL-10 production	ED ₅₀ is 100 pg/ml	BA	--
14-8239	IL-23	Th17, DC	Mouse splenocyte induction of IL-17 secretion	ED ₅₀ is 4 ng/ml	BA	ELISA
14-8279	IL-27	DC, Monocytes	IL-27-mediated inhibition of IL-2 production by mouse splenocytes activated with immobilized anti-CD3 and soluble anti-CD28 antibodies	ED ₅₀ is 100 ng/ml,	BA	--
14-8299	IL-29	Monocytes, DC	Inhibition of the cytopathic effect of EMC virus on HepG2 cells	ED ₅₀ is 0.50 ng/ml	BA	ELISA
14-8310	IL-31	T cells	Induction of STAT3 activation in U-87 cells	STAT3 activation induced at 5 ng/ml	BA	--
14-8338	IL-33	DC, Macrophages	D10.G4.1 cell proliferation assay	ED ₅₀ is 0.3 ng/ml	BA	ELISA
14-8507	BMP-2	--	ATDC-5 cell proliferation assay	ED ₅₀ is 80 ng/ml	BA	--
14-8502	CD40 Ligand	--	T-47D cell proliferation assay	ED ₅₀ is 40 ng/ml	BA	--
14-8503	CTGF	--	HUVEC cell proliferation assay	ED ₅₀ is 1.6 ug/ml	BA	--
14-8988	EGF	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 20 pg/ml	BA	--
14-8987	FGF-acidic	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 1 ng/ml	BA	--
14-8986	FGF-basic 147	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8513	FLT-3 Ligand	--	THP-1 cell proliferation assay	ED ₅₀ is 0.4 ng/ml	BA	--
14-8979	G-CSF	Fibroblast, Endothelium	Mouse NFS-60 cell proliferation assay	ED ₅₀ is 45 pg/ml	BA	--
14-8339	GM-CSF	Th cells, Macrophages, Fibroblasts, Mast cells, Endothelium	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8506	GDNF	--	Rat C6 cell proliferation assay	ED ₅₀ is 1ug/ml	BA	--
14-8439	HGF	--	4MBr5 cell proliferation assay	ED ₅₀ is 50 ng/ml	BA	--
14-8316	IFN α 2	Leukocytes	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 30 pg/ml	BA	ELISA

HUMAN Purified Recombinant Cytokines (contain BSA) Continued

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
14-8318	IFN α 1	Leukocytes	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 0.02 ng/ml	BA	--
14-8319	IFN γ	Th1, NK	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 40 pg/ml	BA	--
14-8505	IGF-2	--	MCF-7 cell proliferation assay	ED ₅₀ is 0.85 ng/ml	BA	--
14-8509	Leptin	--	Human OB-R transfected Mouse BaF/3 cell proliferation assay	ED ₅₀ is 1.36 ng/ml	BA	--
14-8985	M-CSF	--	Mouse NFS-60 cell proliferation assay	ED ₅₀ is 1 ng/ml	BA	--
14-8500	MIF	--	Human U937 cells agarose microdroplet assay	Optimal range of activity between 0.25-1 μ g/ml	BA	--
14-8501	PDGF-BB	--	3T3 cell proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
14-8349	Stem Cell Factor	--	Human TF-1 cell proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
14-8348	TGF β 1	Th cells, B cells, Macrophages, Mast cells	Inhibition of IL-4 induced mouse HT-2 cell proliferation	ED ₅₀ is 0.30 ng/ml	BA	ELISA
14-8368	TGF β 2	Th cells, B cells, Macrophages, Mast cells	Inhibition of IL-4-dependent proliferation of Mouse HT-2 cells	ED ₅₀ is 0.30 ng/ml	BA	--
14-8329	TNF α	Th cells, Monocytes, Macrophages, DC, Mast cells, NK, B cells	Mouse L929 cytotoxicity assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
14-8497	TSLP	--	TARC induction by Human PBMCs	ED ₅₀ of 10 ng/ml	BA	--
14-8916	TWEAK	--	Human PBMCs stimulated production of IL-8	ED ₅₀ is 10 ng/ml	BA	ELISA
14-8359	VEGF	--	HUVEC cell proliferation assay	ED ₅₀ is 10 ng/ml	BA	--

MOUSE Purified Recombinant Cytokines (contain BSA)

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
14-8011	IL-1 α	Monocytes, Macrophages, DC, NK, B cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
14-8012	IL-1 β	Monocyte, Macrophage, DC, NK, B cell, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
14-8021	IL-2	Th1	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8031	IL-3	T cells, NK, Mast cells	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	--
14-8041	IL-4	Th2, NK(T), T Cells, Mast cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8051	IL-5	Th2, Mast cells	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8061	IL-6	Th2, Monocytes, Macrophages, DC, Bone marrow	Mouse B9 cell proliferation assay	ED ₅₀ is 0.01 ng/ml,	BA	ELISA
14-8071	IL-7	Bone marrow, Thymic stroma	Mouse 2E8 cell proliferation assay	ED ₅₀ is 0.5 ng/ml,	BA	--
14-8952	IL-9	Th cells	MO7e cell proliferation assay	ED ₅₀ is 0.4ng/ml	BA	ELISA
14-8101	IL-10	Th2, B cells, Monocytes, Macrophages	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.3 ng/ml,	BA	ELISA
14-8121	IL-12 p70	Monocytes, Macrophages, DC, B cells	Mouse splenocyte induction of IFN- γ production	ED ₅₀ is 0.3 ng/ml,	BA	ELISA
14-8131	IL-13	Th2, Mast cells	TF-1 cell proliferation assay	ED ₅₀ is 3.8 ng/ml	BA	ELISA
14-8151	IL-15	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 100 ng/ml	BA	--
14-8152	IL-15/IL-15R Complex	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 1 ng/ml	BA	--
14-8161	IL-16	Th cells	Human CD4+ T cell chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8171	IL-17A	Th17	NIH/3T3 cell induction of IL-6 production	ED ₅₀ is 3 ng/ml	BA	ELISA
14-8172	IL-17A/F	Th17	NIH/3T3 cell induction of IL-6 production	ED ₅₀ is 10 ng/ml	BA	--

MOUSE Purified Recombinant Cytokines (contain BSA) Continued

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
14-8173	IL-17B	Th17	--	--	--	--
14-8174	IL-17C	Th17	--	--	--	--
14-8175	IL-17E	Th17	--	--	--	--
14-8211	IL-21	Th cells	B9 cell line proliferation induction	ED ₅₀ is 300 pg/ml	BA	ELISA
14-8221	IL-22	Th17	Colo205 cells induction of IL-10 production	ED ₅₀ is 100 pg/ml	BA	--
14-8231	IL-23	Th17, DC	Mouse splenocyte induction of IL-17 production, PMA (5 ng/ml) as a costimulator	ED ₅₀ is 330 pg/ml	BA	ELISA
14-8271	IL-27	DC, Monocytes	IL-27-mediated inhibition of IL-2 production by mouse splenocytes activated with immobilized anti-CD3 and anti-CD28 antibodies	ED ₅₀ is 50 ng/ml	BA	--
14-8281	IL-28	Monocytes, DC	Cytopathic effect of EMC virus on HepG2 cells	ED ₅₀ is 50 ng/ml	BA	--
14-8531	IL-31	T cells	--	--	--	--
14-8332	IL-33	DC, Macrophages	D10.G4.1 cell proliferation assay	ED ₅₀ is 0.03 ng/ml	BA	ELISA
14-8951	Chemerin	--	CHO cells chemerin-induced migration assay	Maximal chemotactic activity between 50-100 ng/ml	BA	--
14-8512	Soluble CD40 Ligand	--	T-47D cell line proliferation assay	ED ₅₀ is 1.5 ug/ml	BA	--
14-8984	EGF	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 20 pg/ml	BA	--
14-8981	FGFa (FGF-acidic)	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 40 pg/ml	BA	--
14-8982	FGFb (FGF-basic)	--	Mouse BALB/c 3T3 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	--
14-8971	G-CSF	Fibroblast, Endothelium	Mouse M-NFS-60 cell proliferation assay	ED ₅₀ is 25 pg/ml	BA	--
14-8331	GM-CSF	Th cells, Macrophages, Fibroblasts, Mast cells, Endothelium	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8431	HGF	--	Mouse IMCD-3 cell proliferation assay	ED ₅₀ is 20 ng/ml	BA	--
14-8508	IGF-1	--	FDC-P1 cell proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
14-8311	IFN γ	Th1, NK	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 100 pg/ml	BA	--
14-8312	IFN α 2	Leukocytes	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 0.1 ng/ml	BA	ELISA
14-8313	IFN α 4	Leukocytes	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 40 pg/ml	BA	ELISA
14-8510	Leptin	--	Human OB-R transfected Mouse Baf/3 cell proliferation assay	ED ₅₀ is 0.5 ng/ml	BA	--
14-8983	M-CSF	Fibroblasts, Endothelium, Epithelium	Mouse NFS-60 cell proliferation assay	ED ₅₀ is 1.3 ng/ml	BA	--
14-8504	NGF- β	--	TF-1 cell proliferation assay	ED ₅₀ is 0.2 ng/ml	BA	--
14-8989	PDGF-AA	--	Mouse 3T3 cell proliferation assay	ED ₅₀ is 9.7 ng/ml	BA	--
14-8341	Stem Cell Factor	--	Mouse MC/9 cell proliferation assay	ED ₅₀ is 15 ng/ml	BA	--
14-8321	TNF α	Th cells, Monocytes, Macrophages, DC, Mast cells, NK, B cells	Mouse L929 cytotoxicity assay	ED ₅₀ is 5 pg/ml	BA	ELISA
14-8498	TSLP	--	Nag8/7 cell proliferation assay	ED ₅₀ is 0.15 ng/ml	BA	--
14-8351	VEGF	--	HUVEC cell proliferation assay	ED ₅₀ is 8 ng/ml	BA	--

RAT Purified Recombinant Cytokines (contain BSA)

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
14-8010	IL-1 β	Monocytes, Macrophages, DC, NK, B cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	--
14-8020	IL-2	Th1	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.4 ng/ml	BA	--
14-8040	IL-4	Th2, NK(T), T cells, Mast cells	ConA-activated rat splenocyte proliferation assay	ED ₅₀ is 1.5 ng/ml	BA	--
14-8060	IL-6	Th2, Monocytes, Macrophages, DC, Bone marrow	Mouse B9 cell proliferation assay	ED ₅₀ is 0.01 ng/ml	BA	--
14-8170	IL-17A	Th17	NIH/3T3 cells induction of IL-6 production	ED ₅₀ is 150 ng/ml	BA	ELISA
14-8315	IFN γ	Th1, NK	Mouse L929/EMCV cell protection assay	ED ₅₀ is 100 pg/ml	BA	--
14-8320	TNF α	Th cells, Monocytes, Macrophages, DC, Mast cells, NK, B cells	Mouse L929 cytotoxicity assay	ED ₅₀ is 0.05 ng/ml	BA	--

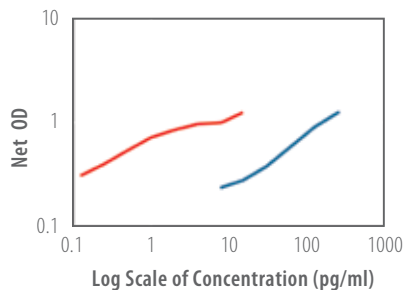
HUMAN Carrier-Free Recombinant Cytokines

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
34-8019	IL-1 α	Monocytes, Macrophages, DC, NK, B Cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 20 pg/ml	BA	--
34-8018	IL-1 β	Monocytes, Macrophages, DC, NK, B Cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8029	IL-2	Th1	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8049	IL-4	Th2, NK(T), T cells, Mast cells	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8069	IL-6	Th2, Monocytes, Macrophages, DC, Bone marrow	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8079	IL-7	Bone marrow, Thymic stroma	Human PBMC PHA-activated proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
34-8089	IL-8	Neutrophils	Human peripheral blood neutrophil chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
34-8109	IL-10	Th cells, B cells, Monocytes, Macrophages	Mouse MC/9 cell proliferation assay costimulated with IL-4	ED ₅₀ is 1 ng/ml	BA	ELISA
34-8129	IL-12	Monocytes, Macrophages, DC, B cells	Human PBMC PHA-activated proliferation assay	ED ₅₀ is 100 pg/ml	BA	ELISA
34-8139	IL-13	Th2, Mast cell	Human TF-1 cell proliferation assay	ED ₅₀ is 1-5 ng/ml	BA	ELISA
34-8159	IL-15	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.10 ng/ml	BA	--
34-8179	IL-17A	Th17	Induction of IL-6 production by NHDF cells	ED ₅₀ is 3 ng/ml	BA	ELISA
34-8178	IL-17A/F	Th17	Induction of IL-6 production by NIH/3T3 cells	ED ₅₀ is 10 ng/ml	BA	ELISA
34-8177	IL-17C	Th17	--	--	--	--
34-8479	IL-17F	Th17	Induction of IL-6 production by NIH/3T3 cells	ED ₅₀ is 500 ng/ml	BA	--
34-8199	IL-19	Monocytes	Induction of IL-6 production by Human PBMCs	ED ₅₀ is 250-500 ng/ml	BA	--
34-8219	IL-21	Th cells	B9 cells proliferation induction	ED ₅₀ is 10 ng/mL	BA	ELISA
34-8229	IL-22	Th17	Colo205 cells induction of IL-10 production	ED ₅₀ is 100 pg/ml	BA	--
34-8239	IL-23	Th17, DC	Mouse splenocyte induction of IL-17 secretion	ED ₅₀ is 4 ng/ml	BA	ELISA
34-8279	IL-27	DC, Monocytes	IL-27-mediated inhibition of IL-2 production by mouse splenocytes activated with immobilized anti-CD3 and soluble anti-CD28 antibodies	ED ₅₀ is 100 ng/ml	BA	--
34-8299	IL-29	Monocytes, DC	Inhibition of the cytopathic effect of EMC virus on HepG2 cells	ED ₅₀ is 0.50 ng/ml	BA	ELISA
34-8310	IL-31	T cells	Induction of STAT3 activation in U-87 cells	STAT3 activation induced at 5 ng/ml	BA	--
34-8338	IL-33	DC, Macrophages	D10.G4.1 cell proliferation assay	ED ₅₀ is 0.3 ng/ml	BA	ELISA
34-8513	FLT-3 Ligand (FLT-3L)	--	THP-1 cell proliferation assay	ED ₅₀ is 0.4 ng/ml	BA	--
34-8523	G-CSF	--	Mouse NFS-60 cell proliferation assay	ED ₅₀ is 45 pg/ml	BA	--
34-8339	GM-CSF	Th cells, Macrophages, Fibroblasts, Mast cells, Endothelium	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8439	HGF	--	4MBr5 cell proliferation assay	ED ₅₀ is 50 ng/ml	BA	--
34-8316	IFN α 2	Leukocytes	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 30 pg/ml	BA	ELISA
34-8318	IFN α 1	Leukocytes	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 0.02 ng/ml	BA	--
34-8319	IFN γ	Th1, NK	Inhibition of the cytopathic effect of EMC virus on A549 cells	ED ₅₀ is 40 pg/ml	BA	--
34-8349	Stem Cell Factor	--	Human TF-1 cell proliferation assay	ED ₅₀ is 2 ng/ml	BA	--
34-8348	TGF β 1	Th cells, B cells, Macrophages, Mast cells	Inhibition of IL-4 induced mouse HT-2 cell proliferation	ED ₅₀ is 0.30 ng/ml	BA	--
34-8368	TGF β 2	Th cells, B cells, Macrophages, Mast cells	Inhibition of IL-4-dependent proliferation of Mouse HT-2 cells	ED ₅₀ is 0.30 ng/ml	BA	--
34-8329	TNF α	Th cells, Monocytes, Macrophages, DC, Mast cells, NK, B cells	Mouse L929 cytotoxicity assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
34-8497	TSLP	--	TARC induction by Human PBMCs	ED ₅₀ is 10 ng/ml	BA	--
34-8359	VEGF	--	HUVEC cell proliferation assay	ED ₅₀ is 10 ng/ml	BA	--

MOUSE Carrier-Free Recombinant Cytokines

* Product Code	Description	Source	Bioassay Method	Typical Bioactivity	Application	
34-8011	IL-1 α	Monocytes, Macrophages, DC, NK, B cells, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
34-8012	IL-1 β	Monocytes, Macrophages, DC, NK, B Cell, Endothelium	Mouse D10S cell proliferation assay	ED ₅₀ is 0.01 ng/ml	BA	ELISA
34-8021	IL-2	Th1	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8031	IL-3	T cells, NK, Mast cells	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	
34-8041	IL-4	Th2, NK(T), T cells, Mast cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8051	IL-5	Th2, Mast cells	Human TF-1 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8061	IL-6	Th2, Monocytes, Macrophages, DC, Bone marrow	Mouse B9 cell proliferation assay	ED ₅₀ is 0.01 ng/ml,	BA	ELISA
34-8071	IL-7	Bone marrow, Thymic stroma	Mouse 2E8 cell proliferation assay	ED ₅₀ is 0.5 ng/ml,	BA	
34-8101	IL-10	Th2, B cells, Monocytes, Macrophages	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.3 ng/ml,	BA	ELISA
34-8121	IL-12 p70	Monocytes, Macrophages, DC, B cells	Mouse splenocyte induction of IFN- γ production	ED ₅₀ is 0.3 ng/ml,	BA	ELISA
34-8131	IL-13	Th2, Mast cells	TF-1 cell proliferation assay	ED ₅₀ is 3.8 ng/ml	BA	ELISA
34-8151	IL-15	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 100 ng/ml	BA	--
34-8152	IL-15/IL-15R Complex	T cells, NK, Monocytes, Macrophages, DC, B cells	Mouse CTLL2 cell proliferation assay	ED ₅₀ is 1 ng/ml	BA	--
34-8171	IL-17A	Th17	NIH/3T3 cell induction of IL-6 production	ED ₅₀ is 3 ng/ml	BA	ELISA
34-8172	IL-17A/F	Th17	NIH/3T3 cell induction of IL-6 production	ED ₅₀ is 10 ng/ml	BA	--
34-8173	IL-17B	Th17	--	--	--	--
34-8174	IL-17C	Th17	--	--	--	--
34-8175	IL-17E	Th17	--	--	--	--
34-8471	IL-17F	Th17	NIH/3T3 cells induction of IL-6 production	ED ₅₀ is 2 μ g/ml	BA	--
34-8211	IL-21	Th cells	B9 cell line proliferation induction	ED ₅₀ is 300 pg/ml	BA	ELISA
34-8221	IL-22	Th17	Colo205 cells induction of IL-10 production	ED ₅₀ is 100 pg/ml	BA	--
34-8231	IL-23	Th17, DC	Mouse splenocyte induction of IL-17 production, PMA (5 ng/ml) as a costimulator	ED ₅₀ is 330 pg/ml	BA	ELISA
34-8271	IL-27	DC, Monocytes	Bioassay of IL-27-mediated inhibition of IL-2 production by Mouse splenocytes activated with immobilized anti-CD3 and soluble anti-CD28 antibodies	ED ₅₀ is 50 ng/ml	BA	--
34-8281	IL-28	Monocytes, DC	Cytopathic effect of EMC virus on HepG2 cells	ED ₅₀ is 50 ng/ml	BA	--
34-8531	IL-31	T cells	--	--	--	--
34-8332	IL-33	DC, Macrophages	D10.G4.1 cell proliferation assay	ED ₅₀ is 0.03 ng/ml,	BA	ELISA
34-8951	Chemerin	--	CHO cells chemerin-induced migration assay	Maximal chemotactic activity between 50-100 ng/ml	BA	--
34-8522	G-CSF	--	Mouse M-NFS-60 cell proliferation assay	ED ₅₀ is 25 pg/ml	BA	--
34-8331	GM-CSF	Th cells, Macrophages, Fibroblasts, Mast cells, Endothelium	Mouse MC/9 cell proliferation assay	ED ₅₀ is 0.1 ng/ml	BA	ELISA
34-8431	HGF	--	Mouse IMCD-3 cell proliferation assay	ED ₅₀ is 20 ng/ml	BA	--
34-8401	HMGB1	--	Mouse RAW264.7 induction of TNF α secretion	ED ₅₀ is 3 - 12 μ g/mL	BA	ELISA
34-8311	IFN γ	Th1, NK	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 100 pg/ml,	BA	--
34-8312	IFN α 2	Leukocytes	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 0.1 ng/ml,	BA	ELISA
34-8313	IFN α 4	Leukocytes	Cytopathic effect of EMC virus on L929 cells	ED ₅₀ is 40 pg/ml	BA	ELISA
34-8341	Stem Cell Factor	--	Mouse MC/9 cell proliferation assay	ED ₅₀ is 15 ng/ml	BA	--
34-8321	TNF α	Th cells, Monocytes, Macrophages, DC, Mast cells, NK, B cells	Mouse L929 cytotoxicity assay	ED ₅₀ is 5 pg/ml	BA	ELISA
34-8498	TSLP	--	Nag8/7 cell proliferation assay	ED ₅₀ is 0.15 ng/ml	BA	--
34-8351	VEGF	--	HUVEC cell proliferation assay	ED ₅₀ is 8 ng/ml	BA	--

* To view the **full listing of product formats**, please enter the product code into the search field of our website www.eBioscience.com



Recombinant mouse IL-15/IL-15Ra complex is 100 times more bioactive than recombinant mouse IL-15. Mouse IL-15 (blue line) and Mouse IL-15/IL-15Ra (red line) bioactivity comparison test measured by mouse CTLL-2 cell proliferation assay. Recombinant cytokine concentration in pg/ml.

Recombinant Chemokines

Chemokines are small secreted proteins that induce chemotaxis in various cell types such as neutrophils, monocytes, lymphocytes, basophils, and eosinophils to sites of infection. They also appear to play a role in the spread of cancer.

Subdivided into two main families, CC and CXC, chemokines are defined by the primary sequence of their N-terminal cysteine residues. CC chemokine proteins have two adjacent cysteine residues at their amino terminus whereas CXC chemokine proteins have the two N-terminal cysteine residues separated by a single amino acid. Chemokines perform their chemotactic effects by binding to chemokine receptors located on the surface of target cells.

eBioscience has a growing portfolio of chemokines. All eBioscience chemokines are available in Purified or Carrier-Free formats and come in a range of sizes (from 5 µg to 500 µg) for your research scale.

HUMAN Purified Recombinant Chemokines (contain BSA)

* Product Code	Description	Chemotaxis	Bioassay Method	Typical Bioactivity	Application	
14-8398	CCL2 (MCP-1)	T cells, NK, DC, Monocytes, Basophils	Human monocytes chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	ELISA
14-8972	CCL3 (MIP-1α)	T cells, NK, DC, Monocytes, Eosinophils	Human monocytes chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8970	CCL5 (Rantes)	T cells, NK, DC, Monocytes, Eosinophils, Basophils	CCR5 -transfected CHO cell chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8957	CCL20 (MIP-3α)	DC	Human T lymphocytes chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8089	CXCL8 (IL-8)	Neutrophils	Human peripheral blood neutrophil chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8967	CXCL10 (IP-10)	T cells, NK	Human T lymphocytes chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8169	IL-16	T cells, Monocytes, Eosinophils	Human CD4+ T cell chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--

MOUSE Purified Recombinant Chemokines (contain BSA)

* Product Code	Description	Chemotaxis	Bioassay Method	Typical Bioactivity	Application	
14-8960	CCL5 (Rantes)	T cells, NK, DC, Monocytes, Eosinophils, Basophils	CCR5 -transfected CHO cell chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8953	CCL20 (MIP-3α)	DC	CCR6-transfected 293 T cells chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--
14-8963	CXCL10 (IP-10)	T Cells, NK	Mouse T lymphocytes chemotaxis assay	Maximal chemoattractant activity between 10-100 ng/ml	BA	--

Additional Recombinant Products

For added convenience in the development of your ELISA assays, eBioscience has developed special, single-use sizing for many of our cytokines to be used as ELISA standards. The Single-Use Ready-SET-Go![®] ELISA Standards come with 4 vials of recombinant cytokine that can be used directly to develop serial dilutions of standard protein. Each Single-Use Ready-SET-Go![®] Standard has been validated in a sandwich ELISA.

HUMAN Single-Use Ready-SET-Go! [®] ELISA Standards	
* Product Code	Description
39-8018	IL-1 β
39-8029	IL-2
39-8049	IL-4
39-8059	IL-5
39-8069	IL-6
39-8959	IL-9
39-8109	IL-10
39-8128	IL-12 p40 monomer
39-8129	IL-12 p70
39-8139	IL-13
39-8179	IL-17A
39-8219	IL-21
39-8239	IL-23
39-8299	IL-29
39-8318	IFN α 1
39-8319	IFN γ
39-8348	TGF β 1
39-8329	TNF α

MOUSE Single-Use Ready-SET-Go! [®] ELISA Standards	
* Product Code	Description
39-8012	IL-1 β
39-8021	IL-2
39-8041	IL-4
39-8051	IL-5
39-8061	IL-6
39-8952	IL-9
39-8101	IL-10
39-8121	IL-12 p70
39-8131	IL-13
39-8151	IL-15
39-8171	IL-17A
39-8231	IL-23
39-8331	GM-CSF
39-8311	IFN γ
39-8321	TNF α



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Headquarters

eBioscience, Inc.
10255 Science Center Drive
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USA

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North America

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858.642.2058
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Austria

Technical Support:
tech@eBioscience.com
Customer Service:
+43 1 796 40 40-305
Austria@eBioscience.com
Fax:
+43 1 796 40 40-400

Belgium

Technical Support:
tech@eBioscience.com
Customer Service:
+43 1 796 40 40 - 308
Belgium@eBioscience.com
Fax:
+43 1 796 40 40 - 400

France

Technical Support:
tech@eBioscience.com
Customer Service:
0 800 800 417
France@eBioscience.com
Fax:
0 800 800 418

Germany

Technical Support:
tech@eBioscience.com
Customer Service:
069 33 29 64 56
Germany@eBioscience.com
Fax:
069 255 77 335

Ireland

Technical Support:
tech@eBioscience.com
Customer Service:
+44 208 951 4482
Ireland@eBioscience.com
Fax:
+44 208 952 7527

Netherlands

Technical Support:
tech@eBioscience.com
Customer Service:
+43 1 796 40 40 - 308
Netherlands@eBioscience.com
Fax:
+43 1 796 40 40 - 400

Switzerland

Technical Support:
tech@eBioscience.com
Customer Service:
+41 21 510 1214
Switzerland@eBioscience.com
Fax:
+41 21 510 1216

United Kingdom

Technical Support:
tech@eBioscience.com
Customer Service:
+44 208 951 4482
UK@eBioscience.com
Fax:
+44 208 952 7527

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