

Human CSF1R/MCSF Receptor/CD115 ELISA Kit | CD115 elisa kit

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CATALOG #
AAA258337

REACTIVITY
Human

PRODUCT SYNONYMS

CSF1R/MCSF Receptor/CD115; Human CSF1R/MCSF Receptor/CD115 ELISA Kit; CSF1R ELISA Kit; Human; colony stimulating factor 1 receptor; C-FMS ELISA Kit; CD115 ELISA Kit; CSF-1R ELISA Kit; CSFR ELISA Kit; FIM2 ELISA Kit; FMS ELISA Kit; HDLS ELISA Kit; M-CSF-R ELISA Kit; MCSF Receptor ELISA Kit; CD115 elisa kit

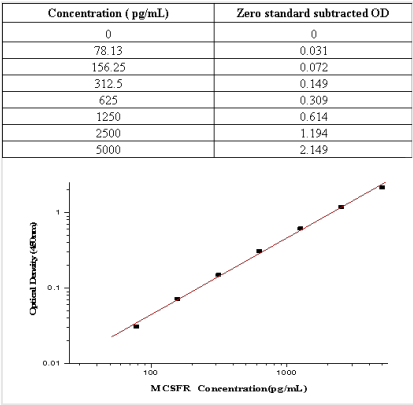
PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	For the quantitative determination of Human CSF1R/MCSF Receptor/CD115 concentration in serum, cell culture supernates and plasma.
Assay Type	Solid Phase Sandwich ELISA (quantitative)
Sample Types	Serum, Cell supernatant, Plasma
Detection Range	78.13-5000pg/mL
Sensitivity	26.93pg/mL
Conjugation	HRP
Interference	Preparations of the factors listed below at 50ng/mL in a mid-range recombinant human MCSFR control were assayed for interference. No significant interference was observed.
Materials Provided	1. 96 well microplate coated with Capture Antibody 2. Detection Antibody conjugated to HRP 3. Standards 4. Wash Buffer Concentrate 5. Dilution Buffer Concentrate 6. Color Reagent A 7. Color Reagent B 8. Stop Solution

Recombinant human			
IL-1	IL-2	IL-33	IL-10
IL-8	TNF- α	IL-4	IL-6
IFN- γ	MIP-1 β	TIMP-1	TIMP-2
GM-CSF	SCF	PDGF	VEGF

Application Data

This assay recognizes both recombinant and natural Human MCSFR. The factors listed below were prepared at 50ng/mL in dilution buffer and assayed for cross-reactivity. No cross-reactivity was observed.



Standard Curve (Sample)
This standard curve is only for demonstration purposes. A standard curve should be generated for each assay.

ADDITIONAL INFORMATION

Related Product Information for CD115 elisa kit

This CSF1R ELISA Kit, Human is an enzyme-linked immunosorbent assay for the quantitative measurement of Human CSF1R protein in Serum, Cell supernatant, Plasma. It contains recombinant Human CSF1R, and antibodies raised against the recombinant protein. This ELISA kit is complete and ready-to-use.

Background: M-CSFR encoded by the proto-oncogene c-fms is the receptor for colony stimulating factor 1 (CSF1R), a cytokine involved in the proliferation, differentiation, and activation of macrophages. This cell surface glycoprotein is consisted by an extracellular ligand-binding domain, a single membrane-spanning segment, and an intracellular tyrosine kinase domain. Binding of CSF1 activates the receptor kinase, leading to "autophosphorylation" of receptor subunits and the concomitant phosphorylation of a series of cellular proteins on tyrosine residues. CSF1R is a tyrosine kinase receptor that is absolutely required for macrophage differentiation and thus occupies a central role in hematopoiesis. CSF1 and its receptor (CSF1R, product of c-fms proto-oncogene) were initially implicated as essential for normal monocyte development as well as for trophoblastic implantation. This apparent role for CSF1/CSF1R in normal mammary gland development is very intriguing because this receptor/ligand pair has also been found to be important in the biology of breast cancer in which abnormal expression of CSF1 and its receptor correlates with tumor cell invasiveness and adverse clinical prognosis. Tumor cell expression of CSF1R is under the control of several steroid hormones (glucocorticoids and progestins) and the binding of several bHLH transcription factors, while tumor cell expression of CSF-1 appears to be regulated by other hormones, some of which are involved in normal lactogenic differentiation. However, studies have demonstrated that CSF1 and CSF1R have additional roles in mammary gland development during pregnancy and lactation. The role of CSF1 and CSF1R in normal and neoplastic mammary development that may elucidate potential relationships of growth factor-induced biological changes in the breast during pregnancy and tumor progression.

References

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Kacinski BM. (1997) CSF-1 and its receptor in breast carcinomas and neoplasms of the female reproductive tract. Mol Reprod Dev. 46(1): 71-4.

Sapi E, et al. (1999) The role of CSF-1 in normal and neoplastic breast physiology. Proc Soc Exp Biol Med. 220(1): 1-8.

Sapi E. (2004) The role of CSF-1 in normal physiology of mammary gland and breast cancer: an update. Exp Biol Med (Maywood). 229(1): 1-11.

Bonifer C, et al. (2008) The transcriptional regulation of the Colony-Stimulating Factor 1 Receptor (csf1r) gene during hematopoiesis. Front Biosci. 13: 549-60.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.