

Human CNTF CLIA Kit | CNTF clia kit

CNTF (Human) LumiAb ELISA Kit

CATALOG #
AAA318524

REACTIVITY
Human

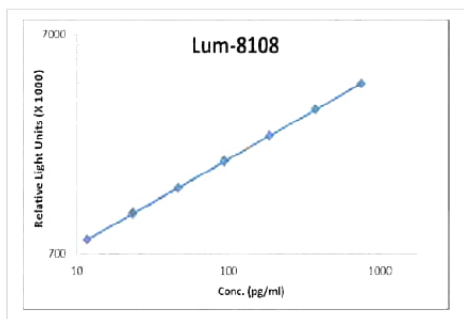
PRODUCT SYNONYMS

CNTF; CNTF (Human) LumiAb ELISA Kit; Human CNTF; Ciliary neurotrophic factor; CNTF clia kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	The LumiAb Human CD163 ELISA is capable of recognizing both recombinant and naturally produced Human CD163 proteins. The antigens listed below were tested at 100 ng/ml and did not exhibit significant cross-reactivity or interference.
Sequence Length	200
Assay Type	Quantitative Sandwich
Sensitivity	40 pg/ml.
Preparation and Storage	Store at 4 degree C for 6 months.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CNTF clia kit	Principle of the Assay: The LumiAb Human CD163 Chemiluminescent ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human CD163 concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human CD163 while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a sensitive luminescent reaction to ensue upon substrate addition. When the Peroxide Enhancer solution is added, the reaction catalyzed by peroxidase yields light that is representative of the antigen concentration. After a brief incubation, the microplate can be read with a luminometer, allowing for generation of a standard curve and subsequent determination of protein concentration!!Background/Introduction: CD163, also known as Scavenger Receptor Cysteine-rich Type 1 Protein M130, is an 1156 amino acid secreted protein that is found on cell membranes. It is a single-pass type I membrane protein with isoform 1 and isoform 2 showing lower surface expression when expressed in cells. CD163 interacts with CSNK2B and is expressed in monocytes and mature macrophages such as Kupffer cells in the liver, red pulp macrophages in the spleen, cortical macrophages in the thymus, resident bone marrow macrophages and meningeal macrophages of the central nervous system. It is also expressed in blood. Isoform 1 is the lowest abundant in the blood. Isoform 2 is the lowest abundant in the liver and the spleen. Isoform 3 is the predominant isoform detected in the blood. CD 163 is induced by anti-inflammatory mediators such as glucocorticoids, interleukin-6/IL6 and interleukin-10/IL10; it is suppressed by proinflammatory mediators like bacterial LPS, IFN-gamma and TNF. CD163 functions as an acute phase-regulated receptor involved in clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages and it may thereby protect tissues from free hemoglobin-mediated oxidative damage. CD163 binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner; it exhibits a higher affinity for complexes of hemoglobin and multimeric haptoglobin of HP*1F phenotype than for complexes of hemoglobin and dimeric haptoglobin of HP*1S phenotype. CD163 induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1. Isoform 3 exhibits the higher capacity for ligand endocytosis and the more pronounced surface expression when expressed in cells. The SRCR domain 3 mediates calcium-sensitive interaction with hemoglobin/haptoglobin complexes. A soluble form (sCD163) of CD163 is produced by proteolytic shedding which can be induced by lipopolysaccharide, phorbol ester and Fc region of immunoglobulin gamma. This cleavage is dependent on protein kinase C and tyrosine kinases and can be blocked by protease inhibitors. The shedding is inhibited by the tissue inhibitor of metalloproteinase TIMP3, and thus probably induced by membrane-bound metalloproteinases ADAMs. Intravenous LPS produces a rapid rise of sCD163 in plasma of patient as it induces metalloproteinase-mediated shedding from monocytes surface.
Product Categories/Family for CNTF clia kit	Luminometer Sandwich ELISA

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758020
NCBI GeneID	1270
NCBI Accession #	NP_000605.1
NCBI GenBank Nucleotide #	NM_000614.4
UniProt Accession #	P26441
NCBI Official Full Name	ciliary neurotrophic factor
NCBI Official Synonym Full Names	ciliary neurotrophic factor
NCBI Official Symbol	CNTF
NCBI Official Synonym Symbols	HCNTF
NCBI Protein Information	ciliary neurotrophic factor

UniProt Protein Name	Ciliary neurotrophic factor
UniProt Gene Name	CNTF
UniProt Synonym Gene Names	CNTF
UniProt Entry Name	CNTF_HUMAN

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.

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Online datasheet: <https://www.aaabiotech.com/human-clia-kits/cntf/318524>