

Recombinant Human CD14 Protein, His Tagged

Cat. No. CD14-11209H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human CD14, His Tag is expressed from human 293 cells (HEK293). It contains AA Thr 20-Met 344 (Accession # AAH10507). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Thr 20
Species	Human
Source	HEK293
ProteinLength	20-344 aa
Description	Cluster of differentiation 14 (CD14), is a cell surface glycoprotein, and is a component of the innate immune system. CD14 is a myelomonocytic differentiation antigen preferentially expressed on monocytes, macrophages, and activated granulocytes. CD14 exists in two forms. Either it is anchored into the membrane by a glycosylphosphatidylinositol tail (mCD14) or it appears in a soluble form (sCD14). Soluble CD14 either appears after shedding of mCD14 (48 kDa) or is directly secreted from intracellular vesicles (56 kDa). CD14 acts as a co-receptor (along with the Toll-like receptor TLR 4 and MD-2) for the detection of bacterial lipopolysaccharide (LPS). CD14 can bind LPS only in the presence of lipopolysaccharide-binding protein (LBP). CD14 has been proposed to be involved in various biological processes, including transportation of other lipids, cell-cell interaction during different immune responses, as well as recognition of apoptotic cells. Although LPS is considered its main ligand, CD14 also recognizes other pathogen-associated molecular patterns. CD14+ cells are monocytes that can

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differentiate into a host of different cells. CD14 has been shown to interact with Lipopolysaccharide-binding protein.

Form Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Molecular Mass The protein has a calculated MW of 35.9 kDa. The protein migrates as 40-53 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin Less than 1.0 EU/µg by the LAL method/rFC method.

Purity >98% as determined by SDS-PAGE. >95% as determined by SEC-MALS.

Storage This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name CD14 CD14 molecule [Homo sapiens (human)]

Official Symbol CD14

Synonyms CD14; CD14 molecule; CD14 antigen; monocyte differentiation antigen CD14; myeloid cell-specific leucine-rich glycoprotein;

Gene ID 929

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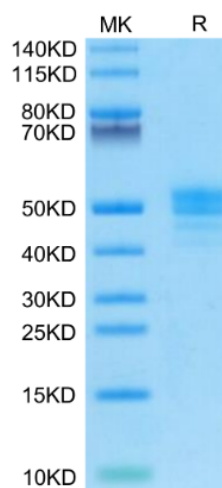
mRNA Refseq [NM_000591](#)

Protein Refseq [NP_000582](#)

MIM [158120](#)

UniProt ID [P08571](#)

SDS-PAGE



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