

Active Recombinant Human CD14

Cat. No. CD14-90H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant sCD14 is a 331 amino acid glycoprotein comprising the extracellular portion of the CD14 receptor. It was expressed in HEK293 cells
Species	Human
Source	HEK293
Description	CD14 is a cell surface anchored glycoprotein that is expressed predominantly by monocytes and tissue macrophages. CD14 associates with MD-2 (LY-96) and TLR4 to form a receptor complex, which signals specifically in response to bacterial lipopolysaccharide (LPS) binding. The CD14/MD-2/TLR4 receptor complex signals via MyD88, TIRAP, and TRAF6, and ultimately activates NF-kappaB. CD14 also exists in a soluble form, designated as sCD14, which is capable of specifically binding LPS in the extracellular space.
Bio-activity	Determined by the dose dependent activation of NF-kappaB in a RAW264 cell line based reporter system, using a sCD14 concentration range of 20 ng/μl to 200 ng/μl. The NF-kappaB activation is enhanced when the assay is done in the presence of 0.25 ng/μl to 1.0 ng/μl bacterial LPS.
AA Sequence	TTPEPCELDD EDFRCVCNFS EPQPDWSEAF QCVSAVEVEI HAGGLNLEPF LKRVDADADP RQYADTVKAL RVRRLTVGAA QVPAQLLVGA LRVLAYSRK ELTLEDLKIT GTMPPLPLEA TGLALSSLRL RNVSWATGRS WLAELQQWLK PGLKVLSIAQ AHSPAFSCEQ VRAFPALTSL DLSDNPGLGE RGLMAALCPH

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KFPAIQNLAL RNTGMETPTG VCAALAAAGV QPHSLDLSHN SLRATVNPSA
 PRCMWSSALN SLNLSFAGLE QVPKGLPAKL RVLDSLSCNRL NRAPQPDELP
 EVDNLTL DGN PFLVPGTALP HEGSMNSGVV P

Purity Greater than 95% by SDS-PAGE gel and HPLC analyses.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name CD14 CD14 molecule [Homo sapiens]

Official Symbol CD14

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

Gene ID 929

mRNA Refseq NM_000591

Protein Refseq NP_000582

MIM 158120

UniProt ID P08571

Chromosome Location 5q22-q32

Pathway Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Hematopoietic cell lineage, organism-specific biosystem; Hematopoietic cell lineage,

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conserved biosystem; Immune System, organism-specific biosystem; Innate Immune System, organism-specific biosystem; LPS transferred from LBP carrier to CD14, organism-specific biosystem;

Function

lipopolysaccharide binding; lipoteichoic acid binding; opsonin receptor activity; peptidoglycan receptor activity;

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