sCD14 Human HEK293 cells

Product Data Sheet

Type: Recombinant
Source: HEK293 cells
Species: Human
Other names: soluble CD14

Cat. No.:

RBG10095010	(10 µg)
RBG10095050	(50 µg)
RBG10095100	(100 µg)

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-?B. CD14 also exists in a soluble form, designated as sCD14, which is capable of specifically binding LPS in the extracellular space. Recombinant sCD14 is a 331 amino acid glycoprotein comprising the extracellular portion of the CD14 receptor. The calculated molecular weight of Recombinant Human sCD14 is 35.6 kDa.

Research topic

Immune Response, Infection and Inflammation

Amino Acid Sequence

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TTPEPCELDD EDFRCVCNFS EPQPDWSEAF QCVSAVEVEI HAGGLNLEPF LKRVDADADP RQYADTVKAL RVRRLTVGAA
QVPAQLLVGA LRVLAYSRLK ELTLEDLKIT GTMPPLPLEA TGLALSSLRL RNVSWATGRS WLAELQQWLK PGLKVLSIAQ
AHSPAFSCEQ VRAFPALTSL DLSDNPGLGE RGLMAALCPH KFPAIQNLAL RNTGMETPTG VCAALAAAGV QPHSLDLSHN
SLRATVNPSA PRCMWSSALN SLNLSFAGLE QVPKGLPAKL RVLDLSCNRL NRAPQPDELP EVDNLTLDGN PFLVPGTALP
HEGSMNSGVV P
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Source

HEK293 cells

Purity

95%

Biological Activity

Determined by the dose dependent activation of NF-?B in a RAW264 cell line based reporter system, using a sCD14 concentration range of 20 ng/µl to 200 ng/µl. The NF-?B activation is enhanced when the assay is done in the presence of 0.25 ng/µl to 1.0 ng/µl bacterial LPS.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C

Storage, Stability/Shelf Life

-20°C

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