

sCD14, Human CellExp™, Human Recombinant

CATALOG #:	7122-10	10 µg
	7122-50	50 µg
ALTERNATE NAMES:	soluble CD14, Cluster of differentiation 14, Myeloid cell-specific leucine-rich glycoprotein, Monocyte differentiation antigen CD14	
SOURCE:	HEK 293 cells	
PURITY:	≥ 95% by SDS-PAGE gel and HPLC analyses	
MOL. WEIGHT:	~35 kDa	
ENDOTOXIN LEVEL:	< 0.1 ng/µg of protein (<1EU/µg).	
FORM:	Lyophilized	
FORMULATION:	Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium phosphate, pH 7.5.	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. 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.

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-kappa-β. 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.

BIOLOGICAL 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/ul to 200 ng/ul. The NF-kappaB activation is enhanced when the assay is done in the presence of 0.25 ng/ul to 1.0 ng/ul bacterial LPS.

AMINO ACID SEQUENCE:

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

RELATED PRODUCTS:

- CD-14, human recombinant (**Cat. No. 4937-100**)
- CD-14, mouse recombinant (**Cat. No. 4938-100**)
- CD-14 Antibody (Clone biG 10) (**Cat. No. 3676-100**)

FOR RESEARCH USE ONLY! Not to be used in humans.