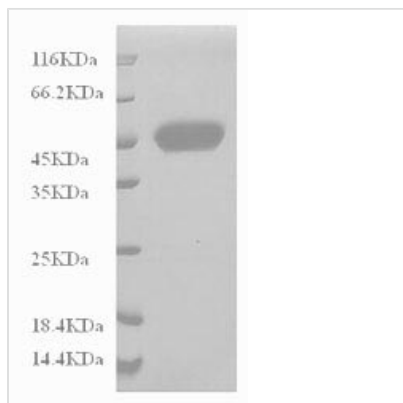




# Recombinant Human Monocyte differentiation antigen CD14 (CD14)

<b>Product Code</b>	CSB-MP004879HU
<b>Relevance</b>	In concert with LBP, binds to monomeric lipopolysaccharide and delivers it to the MD-2/TLR4 complex, thereby mediating the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Up-regulates cell surface molecules, including adhesion molecules.
<b>Abbreviation</b>	Recombinant Human CD14 protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P08571
<b>Product Type</b>	Recombinant Proteins
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	TTPEPCELDDEDFRCVCNFSEPPQPDWSEAFQCVSAVEVEIHAGGLNLEPFLK RVDADADPRQYADTVKALRVRRLLTVGAAQVPAQLLVGALRVLAYSRKELTLE DLKITGTMPPLPLEATGLALSSLRLRNVSATGRSWLAELQQWLKPKLVLSI AQAHSPAFCSEQVRAFPALTSLDLSDNPGLGERGLMAALCPHKFPAIQNLALR NTGMETPTGVCAALAAAGVQPHSLDLSHNSLRATVNPSAPRCMWSSALNSLN LSFAGLEQVPKGLPAKLRVLDLSCNRLNRAPQPDELPEVDNLTLDGNPFLVPG TALPHEGSMN
<b>Research Area</b>	Immunology
<b>Source</b>	Mammalian cell
<b>Target Names</b>	CD14
<b>Expression Region</b>	20-345aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-Myc-tagged
<b>Mol. Weight</b>	39.2kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

This recombinant Human CD14 is a Mammalian cell-expressed protein (Full Length of Mature Protein) with N-terminal 6xHis tag, and it's purified by affinity chromatography method with a purity of 90%+ as determined by SDS-PAGE. Mammalian cell expression system can be used to produce proteins transiently or through stable cell lines, we usually use the transient method for Mammalian cell system protein expression, where the exogenous plasmid is transferred into the cell, and the transcription and translation are directly replicated in the cell. While stable cell lines can be used over several experiments, transient production can generate large amounts of protein in one to two weeks. These transient, high-yield mammalian expression systems utilize suspension cultures and can produce gram-per-liter yields.

CD14 is a glycosylphosphatidylinositol (GPI)-anchored receptor that functions in the TLR4/MD-2 complex to initiate proinflammatory signaling events in response to gram-negative bacteria by recognizing lipopolysaccharide. CD14 has also been shown to be upregulated in tubular epithelial cells of the kidney after unilateral ureteral obstruction and during renal ischemia-reperfusion injury. Stephanie Buchheister et al. revealed that CD14 plays a protective role in inflammatory bowel disease (IBD) development by enhancing intestinal barrier function.

## Shelf Life

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