Cd14
Recombinant Mouse CD14

Catalog No.	CRCC03	**Quantity:**	10 µg

Alternate Names: Monocyte differentiation antigen CD14, Lipopolysaccharide Receptor, LPS receptor, CD14, Myeloid cell-specific leucine-rich glycoprotein

Description: CD14 acts as a receptor for endotoxin (LPS), is expressed strongly on monocytes and macrophages and weakly at the cell surface of neutrophils. CD14 is anchored to cells by linkage to glycosylphosphatidylinositol (GPI) and functions as a high affinity receptor LPS-LBP (lipopolysaccharide binding protein) complex. Furthermore CD14 is present in a soluble form in human serum, urine and other body fluids, acts at physiological concentrations as an LPS agonist, and, at higher concentrations, has an antagonizing effect in cell activation. The myeloid differentiation antigen CD14 acts as the major receptor for bacterial LPS. The dominant form of the recombinant wild type CD14 is the 50 kDa protein.

Recombinant Mouse CD14 is produced from mouse CD14 transfected CHO-cells in serum free medium and purified by TALON His-tag purification. Before transfection, the complete mouse CD14-cDNA was amplified by PCR and cloned into expression vector p-POL-DHFR. A DNA sequence encoding the extracellular domain (Met1-Pro345) of mouse CD14 precursor was fused with a polyhistidine tag sequence at the C-terminus.

UniProt ID: P10810

Gene ID: 12475

Source: CHO cells

Molecular Weight: 50 kDa

Formulation: Lyophilized from a 1 mg/ml solution in PBS, pH 7.2

Purity: 90-95% by SDS-PAGE

Endotoxin Level: < 0.1 ng/ml by LAL

Purification: Metal affinity chromatography by His-tag

Biological Activity: Up to 5 µg/ml mouse CD14 inhibits binding of FITC-LPS (0.5 µg/ml) to mouse CD14+CHO transfectants. It does not activate monocytes itself.

Reconstitution: **Centrifuge vial prior to opening**. Add 10 µl sterile distilled water to the vial to fully solubilize the protein. This solution can then be diluted in PBS or other buffers.

Applications: ELISA, Western blot, Inhibition assays, cell culture experiments.

Storage & Stability: The lyophilized product is stable at -80°C for 1 year, at 2-8°C for 10 months, at room temperature for 4 weeks, and at 37°C for 1 week. After reconstitution, store in working aliquots at -80°C. Stable for 1 year. For long term storage it is recommended to add a carrier protein (e.g., 0.1% BSA).
Avoid repeated freeze-thaw cycles.

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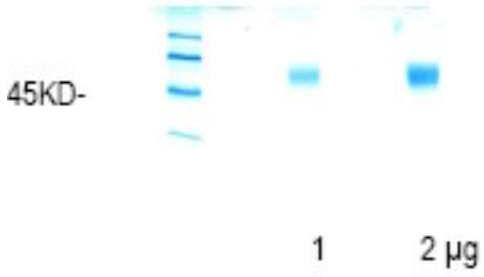
Determination of molecular weight at approximately 50 kDa



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