



# Recombinant Protein Technical Manual

## Recombinant Human CD14 Protein (aa 20-352, His Tag)

RPES4965

### Product Data:

**Product SKU:** RPES4965

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P08571

### Protein Information:

**Molecular Mass:** 36.8 kDa

**AP Molecular Mass:** 54 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Monocyte Differentiation Antigen CD14; Myeloid Cell-Specific Leucine-Rich Glycoprotein; CD14

## Immunogen Information:

**Sequence:** Thr 20-Cys352

## Background:

CD14 is a cell surface glycoprotein that is preferentially expressed on monocytes/macrophages. CD14 is anchored to cells by linkage to glycosylphosphatidylinositol (GPI) and functions as a pattern recognition receptor that binds lipopolysaccharides (LPS) and a variety of ligands derived from different microbial sources. The binding of CD14 with LPS is catalyzed by LPS binding protein (LBP). Toll like receptors have also been implicated in the transduction of CD14-LPS signals. Soluble CD14 can be released from the cell surface by phosphatidylinositol-specific phospholipase C and has been detected in serum and body fluids. High concentrations of soluble CD14 have been shown to inhibit LPS mediated responses. However, soluble CD14 can also potentiate LPS response in cells that do not express cell surface CD14.