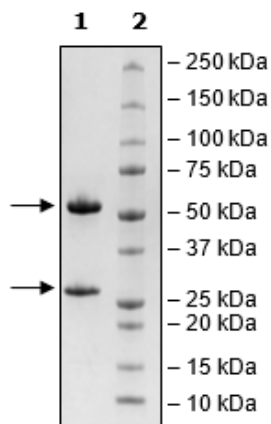


## Product Information

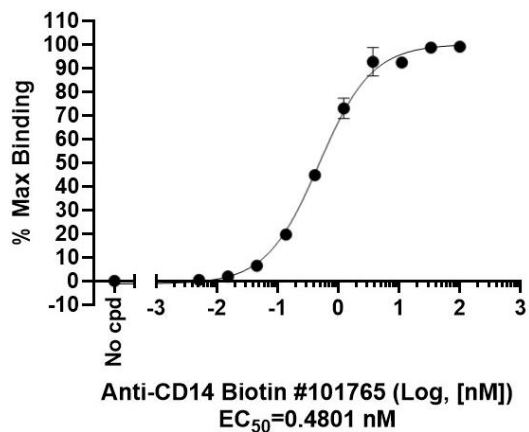
<b>Description:</b>	Recombinant human anti-CD14 antibody recognizing human CD14 protein. This anti-CD14 antibody is a purified recombinant antibody, which is labeled with biotin using Avi-Tag™ technology at the C-terminus of the heavy chain unit.
<b>Background:</b>	CD14 (Cluster of Differentiation-14) is a surface antigen expressed predominantly by monocytes and macrophages. It is considered a patterned recognition receptor (PRR), which recognizes pathogen markers. Specifically, CD14 acts as a co-receptor for lipopolysaccharides (LPS) found in the outer membrane of gram-negative bacteria. Through this interaction, CD14 supports initiation of the innate immune response during bacterial infection. CD14 also contributes toward immune responses to viral pathogens such as human respiratory syncytial virus (RSV) and may amplify the inflammatory response observed in severe cases of SARS-CoV-2 infection (COVID-19). Monoclonal antibodies against CD14 are currently undergoing clinical trial as a candidate treatment to limit severe inflammatory responses common in patients hospitalized with COVID-19.
<b>Species:</b>	Human
<b>Isotype:</b>	IgG4κ
<b>Clonality:</b>	Monoclonal
<b>Concentration:</b>	1.29 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	Heavy Chain: 51 kDa; Light Chain: 24 kDa + glycans
<b>Glycosylation:</b>	This antibody runs at a higher MW by SDS-PAGE due to glycosylation.
<b>Label:</b>	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation confirmed to be ≥90%.
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Assay Conditions:</b>	The antibody was validated by measuring its binding to CD14 antigen by ELISA. The CD14 protein (BPS Bioscience #101187) was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 4 µg/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 µl of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at room temperature. After removing the blocking buffer, 50 µl/well of purified biotinylated anti-CD14 antibody (BPS Bioscience #101765), serially diluted in Blocking Buffer 2, was added for 30 minutes at room temperature. The plate was washed, incubated with Streptavidin-HRP, washed again, and incubated with the Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values.
<b>Applications:</b>	Useful for studying the binding of CD14 in ELISA and in cellular assays.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### CD14: Anti-CD14-Biotin Binding Assay



### Biotin-Avidin Pulldown

