

RP01306

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Recombinant Human CD47 Protein

Catalog No.: RP01306

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	961	Q08722

Tags

C-His

Synonyms

CD47; IAP; MER6; OA3; CD47 molecule; IAP; MER6; OA3

Product Information

Source

HEK293 cells

Purification

≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

This protein is a membrane protein, which is involved in the increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix. The encoded protein is also a receptor for the C-terminal cell binding domain of thrombospondin, and it may play a role in membrane transport and signal transduction. This protein has broad tissue distribution, and is reduced in expression on Rh erythrocytes.

Basic Information

Description

Recombinant Human CD47 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln19-Pro139) of human CD47 (Accession #NP_001768.1) fused with an 6×His tag at the C-terminus.

Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Human CD47 at 5 μg/mL (100 μL/well) can bind Human SIRPA with a linear range of 0.488-189.26 ng/mL. | Measured by its binding ability in a functional ELISA. Immobilized Human CD47 (Catalog: RP01306) at 2 μg/mL (100 μL/well) can bind Human SIRP-alpha/CD172a (Catalog: RP00171) with a linear range of 0.06-22.3 ng/mL. | 3. Loaded Human SIRP-alpha/CD172a Protein, C-hFc&His (Catalog: RP00171) on ProA Biosensor, can bind Human CD47 Protein, C-His Tag (Catalog: RP01306) with an affinity constant of 11.1 nM as determined in BLI assay (Gator).

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

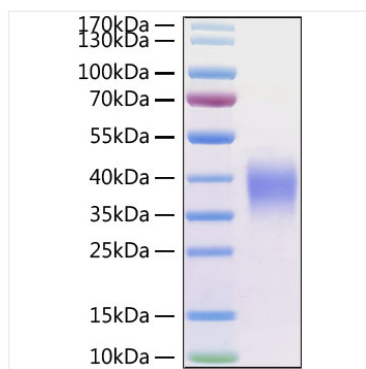
Contact



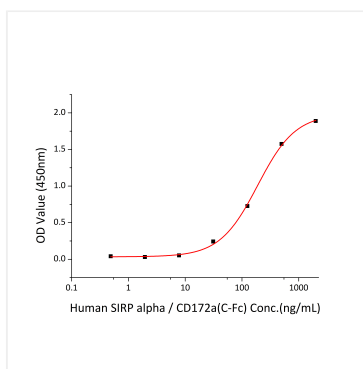
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* For your safety and health, please wear a lab coat and disposable gloves when handling.

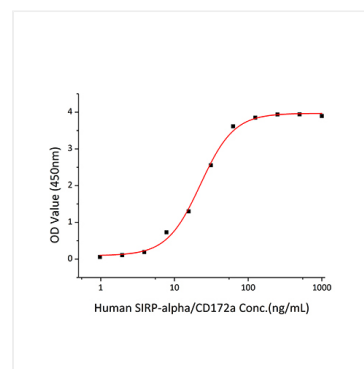
Validation Data



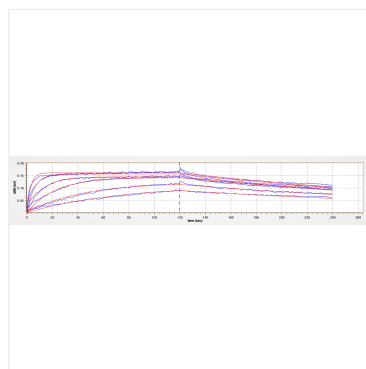
Recombinant Human CD47 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Human CD47 at 5 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Human SIRPA with a linear range of 0.488-189.26 ng/mL.



Immobilized Human CD47 (Catalog: RP01306) at 2 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Human SIRP-alpha/CD172a (Catalog: RP00171) with a linear range of 0.06-22.3 ng/mL.



Loaded Human SIRP-alpha/CD172a Protein, C-hFc&His(Catalog: RP00171) on ProA Biosensor, can bind Human CD47 Protein, C-His Tag (Catalog: RP01306) with an affinity constant of 11.1 nM as determined in BLI assay (Gator).