Recombinant Human SIRP-alpha/CD172a Protein

Catalog No.: RP00171

Sequence Information

Species
Human

Gene ID
140885

Swiss Prot
P78324

Tags
C-hFc&His

Synonyms
BIT, CD172A, MFR, MYD-1, P84, PTPNS1, SHPS1, SIRP,SIRPA, CD172A,MFR,MYD-1,P84,PTPNS1, SHPS1,SIRP

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE;≥ 90 % as determined by HPLC.

Calculated MW
64.10 kDa

Observed MW
Approximately 100 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

The protein is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein.

Basic Information

Description
Recombinant Human SIRP-alpha/CD172a Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu31-Arg370) of human SIRP alpha/CD172a (Accession #NP_542970.1) fused with an Fc, 6×His tag at the C-terminus.

Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human CD47 at 1 μg/mL (100 μL/well) can bind Recombinant Human SIRP alpha with a linear range of 1-6 ng/mL.
2.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).
3.Measured by the ability of the immobilized protein to support the adhesion of the OVCAR-3 cells. The ED_{50} for this effect is 0.53-2.12 μg/mL.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

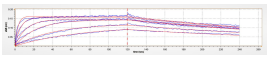
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

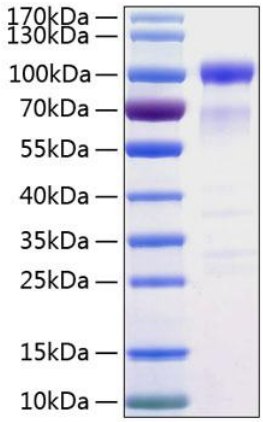
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

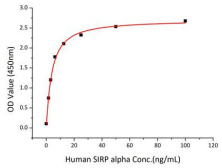
Validation Data



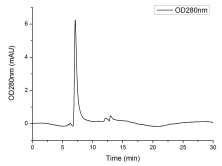
Loaded Human SIRP-alpha/CD172a Protein, C-hFc&His(Catalog: RP00171) on ProA Biosensor, can bind Human CD47 Protein, C-His Tag (Catalog: RP01306) with an affinity constant of 11.1 nM as determined in BLI assay (Gator).



Recombinant Human SIRP-alpha/CD172a Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Recombinant Human CD47 at 1 μg/mL (100 μL/well) can bind Recombinant Human SIRP alpha with a linear range of 1-6 ng/mL.



The purity of Human SIRP alpha/CD172a Protein (Cat.RP00171) was greater than 90% as determined by SEC-HPLC.