

Recombinant human SIRP alpha/CD172a protein

Catalog Number: ATGP4069

PRODUCT INFORMATION

Expression system

HEK293

Domain

27-373aa

UniProt No.

P78324

NCBI Accession No.

NP_542970.1

Alternative Names

SIRPA, Tyrosine-protein phosphatase non-receptor type substrate 1 isoform 1, SHP substrate 1, SHPS-1, Brain Ig-like molecule with tyrosine-based activation motifs, Bit, CD172 antigen-like family member A, Inhibitory receptor SHPS-1, Macrophage fusion receptor, MyD-1 antigen, Signal-regulatory protein alpha-1, Sirp-alpha-1, Signal-regulatory protein alpha-2, Sirp-alpha-2, Signal-regulatory protein alpha-3, Sirp-alpha-3, p84, CD172a, BIT, MFR, MYD1, PTPNS1, SHPS1, SIRP

PRODUCT SPECIFICATION

Molecular Weight

39kDa (356aa)

Concentration

1mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS - PAGE

Biological Activity

Measured by its binding ability in a functional ELISA with Human CD47 (CAT# ATGP4070).

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human SIRP alpha/CD172a protein

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Description

SIRP alpha is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. SIRP alpha interacts with a broadly expressed transmembrane protein CD47. This interaction negatively controls effector function of innate immune cells such as host cell phagocytosis. 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. It was found to participate in signal transduction mediated by various growth factor receptors. Recombinant human SIRP alpha, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

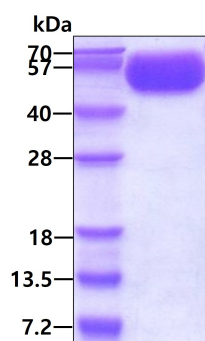
<DGS>GVAGEEE LQVIQPKSV LVAAGETATL RCTATSLIPV GPIQWFRGAG PGRELIYNQK EGHFPRVTTV SDLTRNNMD
FSIRIGNITP ADAGTYCYVK FRKGSPDDVE FKSGAGTELS VRAKPSAPVV SGPAARATPQ HTVSFTCESH GFSPRDITLK
WFKNGNELSD FQTNVDPVGE SVSYSIHSTA KVVLTREDVH SQVICEVAHV TLQGDPLRGT ANLSETIRVP PTLEVTQQPV
RAENQVNVTC QVRKFYPQRL QLTWLENGNV SRTETASTVT ENKDGTYNWM SWLLVNVSAH RDDVKLTCQV
EHDGQPAVSK SHDLKVSAPH KEQGSNTAAE NTGSNERNIY <HHHHHH>

General References

Timms J.F., Swanson K.D., et al. (1999) Curr. Biol. 9:927-930.
Barclay, A.N. & M.H. Brown (2006) Nat. Rev. Immunol. 6:457.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

Recombinant human SIRP alpha/CD172a protein

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Human SIRP alpha/CD172a is coated at 2 ug/ml (100 ul/well) can bind Human CD47 (CAT# ATGP4070) in a Functional ELISA assay.

