

Recombinant Human SIRP-beta 1/CD172b Protein

Catalog No.: RP01351 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 10326 000241

Tags C-His

Synonyms 9930027N05Rik;SIRPbeta;Sirpb;Sirpb1;SIRPB1

Product Information

Source Purification HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

38.10 kDa 55-60 kDa

Endotoxin

< 0.1 EU/ μ g of the protein by LAL method.

Formulation

Lyophilized from a $0.22 \mu m$ 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

<u>a</u>	400-999-6126
\bowtie	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

Background

Signal-regulatory protein beta-1 (SIRP beta 1) also known as SIRP1, belongs to signal-regulatory-protein (SIRP) family, and immunoglobulin superfamily. Signal-regulatory proteins (SIRPs) are cell-surface glycoproteins expressed on myeloid and neural cells that have been shown to recruit SH2 domain-containing protein phosphatase 1 (SHP-1) and SHP-2 and to regulate receptor tyrosine kinase-coupled signaling. SIRP are classified as SIRP alpha molecules, containing 11- to 113-amino acid long, or SIRP beta molecules, with a 5-amino acid long intracytoplasmic domain. SIRP beta 1 is a new DAP12-associated receptor involved in the activation of myeloid cells, which contains a short cytoplasmic domain that lacks sequence motifs capable of recruiting SHP-1 and SHP-2. SIRP beta 1 acts as an activating isoform of SIRP alpha molecules, confirming the co-existence of inhibitory ITIM-bearing molecules, recruiting SHP-1 and SHP-2 protein tyrosine phosphatases, and activating counterparts, whose engagement couples to protein tyrosine kinases via ITAM-bearing molecules.

Basic Information

Description

Recombinant Human SIRP-beta 1/CD172b Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu30-Leu371) of human SIRPB1/CD172b (Accession $\#NP_006056.2$) fused with a 6×His tag at the C-terminus.

Bio-Activity

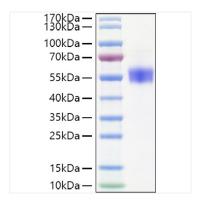
Storage

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.

Validation Data



Recombinant Human SIRP-beta 1/CD172b Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.