

SIRP beta 1 Protein, Human (HEK293, His)

Cat. No.:	HY-P70719
Synonyms:	Signal-regulatory protein beta-1; SIRP-beta-1; CD172 antigen-like family member B; CD172b; SIRPB1
Species:	Human
Source:	HEK293
Accession:	O00241 (E30-E362)
Gene ID:	10326
Molecular Weight:	45-55 kDa

PROPERTIES

AA Sequence	<pre> E D E L Q V I Q P E K S V S V A A G E S A T L R C A M T S L I P V G P I M W F R G A G A G R E L I Y N Q K E G H F P R V T T V S E L T K R N N L D F S I S I S N I T P A D A G T Y Y C V K F R K G S P D D V E F K S G A G T E L S V R A K P S A P V V S G P A V R A T P E H T V S F T C E S H G F S P R D I T L K W F K N G N E L S D F Q T N V D P A G D S V S Y S I H S T A R V V L T R G D V H S Q V I C E I A H I T L Q G D P L R G T A N L S E A I R V P P T L E V T Q Q P M R A E N Q A N V T C Q V S N F Y P R G L Q L T W L E N G N V S R T E T A S T L I E N K D G T Y N W M S W L L V N T C A H R D D V V L T C Q V E H D G Q Q A V S K S Y A L E I S A H Q K E H G S D I T H E </pre>
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human SIRP beta 1/CD172b at 1 µg/mL (100 µL/well) can bind Biotinylated Recombinant Human SP-D. The ED ₅₀ for this effect is 6753 ng/mL.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 or 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

SIRP beta 1 protein, an immunoglobulin-like cell surface receptor, plays a vital role in the negative regulation of receptor tyrosine kinase-coupled signaling processes. Additionally, it participates in the recruitment of the tyrosine kinase SYK, triggering the activation of myeloid cells when associated with TYROBP. Existing as a homodimer with disulfide linkages, SIRP beta 1 interacts specifically with TYROBP, leading to the recruitment of SYK. This intricate molecular interplay positions SIRP beta 1 at the nexus of cellular signaling regulation, highlighting its significance in modulating myeloid cell activation and the intricate network of protein interactions that contribute to its functional role.

Caution: Product has not been fully validated for medical applications. For research use only.

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