SIRP beta 2 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P71315
Synonyms:	dJ776F14.2; PTPN1L; PTPNS1L3; Signal-Regulatory Protein Beta 2; Signal-Regulatory Protein Beta-2; SIRP beta 2; SIRP-beta-2; SIRPG
Species:	Human
Source:	HEK293
Accession:	Q5JXA9 (Q33-G287)
Gene ID:	284759
Molecular Weight:	80-95 kDa

PROPERTIES

AA Sequence	Q S S R N D W Q V L Q P E G P M L V A E G E T L L L R C M V V G S C T D G M I K W V K V S T Q D Q Q E I Y N F K R G S F P G V M P M I Q R T S E P L N C D Y S I Y I H N V T R E H T G T Y H C V R F D G L S E H S E M K S D E G T S V L V K G A G D P E P D L W I I Q P Q E L V L G T T G D T V F L N C T V L G D G P P G P I R W F Q G A G L S R E A I Y N F G G I S H P K E T A V Q A S N N D F S I L L Q N V S S E D A G T Y Y C V K F Q R K P N R Q Y L S G Q G T S L K V K A K S T S S K E A E F T S E P A T E M S P T G
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. 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	Signal-regulatory protein beta-2 (SIRP beta 2), a novel positive regulator of innate immunotherapy, 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. SIRP beta 2 has high homology with SIRP beta 1. SIRP beta 2 is expressed under normal physiological conditions in macrophages and granulocytes at the mRNA and protein level and that endogenous expression

of SIRP beta 2 on PMNs correlated with trogocytosis of cancer cells. Furthermore, ectopic expression of SIRP beta 2 in the THP-1 monocytic cell line and in primary cord blood-derived macrophages increased adhesion, differentiation, and cancer cell phagocytosis. SIRP beta 2 recruited the immune activating adaptor protein DAP12 to positively regulate innate immunity, with a mutation of the charged lysine responsible for DAP12 interaction abrogating functional activity. Finally, ectopic expression of SIRP beta 2 on the THP-1 model enhanced surface expression of MHC-I molecules, enhanced T cell activation as seen by increased NFAT activation in a Jurkat report system and the upregulation of activation markers CD69 and CD25 and IFN-γ secretion on primary T cells[1].

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA