SH2D1A Protein, Human (His)

Cat. No.:	HY-P71038
Synonyms:	SH2 Domain-Containing Protein 1A; Duncan Disease SH2-Protein; Signaling Lymphocytic Activation Molecule-Associated Protein; SLAM-Associated Protein; T-Cell Signal Transduction Molecule SAP; SH2D1A; DSHP; SAP
Species:	Human
Source:	E. coli
Accession:	O60880 (M1-P128)
Gene ID:	4068
Molecular Weight:	Approximately 16.0 kDa

PROPERTIES

AA Sequence	M D A V A V Y H G K I S R E T G E K L L L A T G L D G S Y L L R D S E S V P G V Y C L C V L Y H G Y I Y T Y R V S Q T E T G S W S A E T A P G V H K R Y F R K I K N L I S A F Q K P D Q G I V I P L Q Y P V E K K S S A R S T Q G T T G I R E D P D V C L K A P
Appearance	Solution
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, 10% Glycerol, pH 7.5.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

DESCRIPTION

Background	SH2D1A Protein, a cytoplasmic adapter, intricately orchestrates signaling receptors within the signaling lymphocytic activation molecule (SLAM) family, including SLAMF1, CD244, LY9, CD84, SLAMF6, and SLAMF7. Functionally collaborating with SH2D1B/EAT-2 in SLAM signaling, it was initially proposed that SH2D1A's association with SLAMF1 prevents its binding to inhibitory effectors such as INPP5D/SHIP1 and PTPN11/SHP-2. Contrary to this, simultaneous interactions lead to the recruitment of FYN, triggering the phosphorylation and activation of SLAMF1. SH2D1A plays a pivotal role in positively regulating CD244/2B4- and CD84-mediated natural killer (NK) cell functions and can also enhance NK cell activation mediated by CD48, SLAMF6, LY9, and SLAMF7. In the context of NK cell-mediated cytotoxicity, SH2D1A augments conjugate formation with target cells. Beyond its role in NK cells, SH2D1A may extend its influence to the regulation of neurotrophin receptors NTRK1, NTRK2, and NTRK3, as evidenced by its interactions with these receptors. Additionally, SH2D1A interacts

	with CD84, CD244, LY9, SLAMF1, and FYN, showcasing its versatile involvement in intricate cellular signaling networks.

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

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