CRACC/SLAMF7 Protein, Mouse (202a.a, HEK293, His)

Cat. No.:	HY-P72461
Synonyms:	SLAM Family Member 7; CD2 Subset 1; CRACC; CD319; SLAMF7; CS1
Species:	Mouse
Source:	HEK293
Accession:	Q8BHK6 (S23-G224)
Gene ID:	75345
Molecular Weight:	30-38 kDa

PROPERTIES

AA Sequence	S G T L K K V A G A L D G S V T F T L N I T E I K V D Y V V W T F N T F F L A M V K K D G V T S Q S S N K E R I V F P D G L Y S M K L S Q L K K N D S G A Y R A E I Y S T S S Q A S L I Q E Y V L H V Y K H L S R P K V T I D R Q S N K N G T C V I N L T C S T D Q D G E N V T Y S W K A V G Q G D N Q F H D G A T L S I A W R S G E K D Q A L T C M A R N P V S N S F S T P V F P Q K L C E D A A T D L T S L R 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	The CRACC/SLAMF7 protein functions as a self-ligand receptor within the signaling lymphocytic activation molecule (SLAM) family. Through homo- or heterotypic cell-cell interactions, SLAM receptors modulate the activation and differentiation of a diverse array of immune cells, playing a crucial role in the regulation and coordination of both innate and adaptive immune responses. The activities of CRACC/SLAMF7 are intricately controlled by the presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP, and/or SH2D1B/EAT-2. The protein mediates natural killer (NK) cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway and positively regulates NK cell functions in a

mechanism dependent on the adapter SH2D1B. Additionally, homotypic interactions between NK cells may contribute to activation, but in the absence of SH2D1B, CRACC/SLAMF7 inhibits NK cell function. It also exerts inhibitory effects in T-cells and may play a role in lymphocyte adhesion. In LPS-activated monocytes, CRACC/SLAMF7 negatively regulates the production of pro-inflammatory cytokines. The protein further interacts with various signaling molecules, including SH2D1B, PTPN6/SHP-1, PTPN11/SHP-2, INPP5D/SHIP1, CSK, and FYN, highlighting its involvement in diverse cellular processes and molecular interactions.

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