

Human SLAMF7 / CRACC / CD319 Protein (His Tag)

Catalog Number: 11691-H08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

19A; CD319; CRACC; CS1; SLAM7

Protein Construction:

A DNA sequence encoding the human SLAMF7 (NP_067004.3) extracellular domain (Met 1-Met 226) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 93 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind biotinylated human SH2D1A-His(Cat:11149-H07E) in a functional ELISA.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ser 23

Molecular Mass:

The recombinant human SLAMF7 consists of 215 amino acids and has a predicted molecular mass of 23.8 kDa. The apparent molecular mass of rh SLAMF7 is approximately 35-45 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

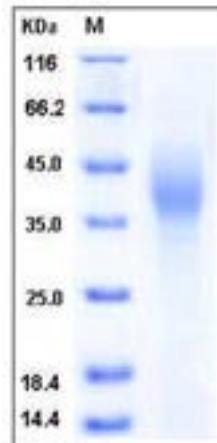
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

SLAM family member 7 (SLAMF7), also known as CRACC, CD319, CD2-like receptor-activating cytotoxic cells, and CS1, is a single-pass type I membrane protein and a member of the CD2 family of cell surface receptors. SLAMF7 is expressed in NK cells, activated B-cells, NK-cell line but not in promyelocytic, B-cell lines, or T-cell lines. Although the cytoplasmic domain of CS1 contains immunoreceptor tyrosine-based switch motifs (ITSM), which enables to recruit signaling lymphocyte activation molecule (SLAM)-associated protein (SAP/SH2D1A), it activates NK cells in the absence of a functional SAP. CS1 is a self ligand and homophilic interaction of CS1 regulates NK cell cytolytic activity. CRACC positively regulated natural killer cell functions by a mechanism dependent on the adaptor EAT-2 but not the related adaptor SAP. However, in the absence of EAT-2, CRACC potently inhibited natural killer cell function. It was also inhibitory in T cells, which are typically devoid of EAT-2. Thus, CRACC can exert activating or inhibitory influences on cells of the immune system depending on cellular context and the availability of effector proteins.

References

1. Lee JK, et al. (2004) Molecular and functional characterization of a CS1 (CRACC) splice variant expressed in human NK cells that does not contain immunoreceptor tyrosine-based switch motifs. *Eur J Immunol.* 34(10): 2791-9.
2. Tassi I, et al. (2005) The cytotoxicity receptor CRACC (CS-1) recruits EAT-2 and activates the PI3K and phospholipase Cgamma signaling pathways in human NK cells. *J Immunol.* 175(12): 7996-8002.
3. Lee JK, et al. (2007) CS1 (CRACC, CD319) induces proliferation and autocrine cytokine expression on human B lymphocytes. *J Immunol.* 179(7): 4672-8.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • **Tel: 215-583-7898**

Global Customer: Fax :+86-10-5862-8288 • **Tel:+86-400-890-9989** • <http://www.sinobiological.com>