# **Elabscience**®

## Recombinant Rhesus Macaque SLAM Family Member 7/SLAMF7/CD319/CRACC (C-6His)

### Catalog Number: PKSQ050108

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Rhesus Macaque
Source	HEK293 Cells-derived Rhesus Macaque Macaque protein Ser23-Met226, with an C-
	terminal His
Calculated MW	23.3 kDa
Observed MW	30-50 kDa
Accession	F7HQ72
Bio-activity	Not validated for activity
Properties	
Purity	>95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

# **Elabscience**®

SLAMF7 is a single-pass type I membrane protein and contains 1 Ig-like C2-type (immunoglobulin-like) domain. 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 recruite signaling lymphocyte activation molecule (SLAM)-associated protein (SAP/SH2D1A), it activates NK cells in the absence of a functional SAP. SLAMF7 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, SLAMF7 can exert activating or inhibitory influences on cells of the immune system depending on cellular context and the availability of effector proteins.