

## Mouse CRACC/SLAMF7 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: BAF4628

DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse CRACC/SLAMF7 in Western blots. In Western blots, less than 5% cross-reactivity with recombinant human CRACC is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CRACC/SLAMF7	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.	

AD	DI.	10	A T		ALC:
AP	PL	JU	ΑΙ	ıu	NP.

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Recommended
Concentration

Western Blot	0.1 μg/mL	Recombinant Mouse CRACC/SLAMF7 (Catalog # 4628-SF)

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  12 months from date of receipt, -20 to -70 °C as supplied.  1 month, 2 to 8 °C under sterile conditions after reconstitution.  6 months, -20 to -70 °C under sterile conditions after reconstitution.		

## **BACKGROUND**

CD2-like receptor activating cytotoxic cells (CRACC), also known as CS1, novel Ly9, SLAMF7, and CD319, is a 66 kDa type I transmembrane glycoprotein in the SLAM subgroup of the CD2 family (1). Mature mouse CRACC consists of a 202 amino acid (aa) extracellular domain (ECD) with one Ig-like V-set domain and one Ig-like C2-set domain, a 21 aa transmembrane segment, and an 88 aa cytoplasmic domain with two immunoreceptor tyrosine-based switch motifs ITSMs (2, 3). Within the ECD, mouse CRACC shares 53% aa sequence identity with human CRACC. It shares 19%-35% aa sequence identity with comparable regions of other mouse SLAM proteins including 2B4, BLAME, CD2F-10, CD84, CD229, NTB-A, and SLAM/CD150. Additional isoforms of mouse CRACC are distinguished by deletions and/or substitutions in their cytoplasmic domains. CRACC is expressed on the surface of NK cells, CD8<sup>+</sup> T cells, activated B cells, and mature dendritic cells (4, 5). It interacts homophilically to induce NK, CTL, and B cell activation (4-7). In human NK cells, activated CRACC transmits signals following association with the adaptor protein EAT-2 (8).

## References:

- 1. Veillette, A. (2006) Immunol. Rev. 214:22.
- 2. Tovar, V. et al. (2002) Immunogenetics 54:394.
- 3. Murphy, J.J. et al. (2002) Biochem. J. **361**:431.
- 4. Bouchon, A. et al. (2001) J. Immunol. 167:5517.
- 5. Lee, J.K. et al. (2007) J. Immunol. **179**:4672.
- 6. Kumaresan, P.R. *et al.* (2002) Mol. Immunol. **39**:1.
- 7. Stark, S. and C. Watzl (2006) Int. Immunol. 18:241.
- 8. Tassi, H. and M. Colonna (2005) J. Immunol. 175:7996.

