Mouse CRACC/SLAMF7 Antibody

Monoclonal Rat IgG_{2A} Clone # 520914

Catalog Number: MAB46281

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CRACC/SLAMF7 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human CRACC is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 520914
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CRACC/SLAMF7 Ala22-Gly224 Accession # Q8BHK6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

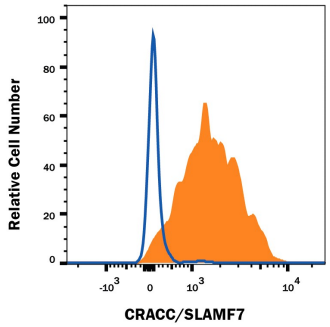
APPLICATIONS

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	Sample
Flow Cytometry	0.25 µg/10^6 cells	See Below

DATA

Flow Cytometry



Detection of CRACC/SLAMF7 in Mouse Splenoctyes by Flow Cytometry. Mouse Splenocytes were stained with Rat Anti-Mouse CRACC/SLAMF7 Monoclonal Antibody (Catalog # MAB46281, filled histogram) or isotype control antibody (Catalog # MAB006, open histogram), followed by Phycoerythrin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0105B). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
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, $CD8^+$ 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:

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