Mouse CRACC/SLAMF7
Alexa Fluor® 488-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 520914

Catalog Number: FAB46281G

100 µg

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
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	0.25-1 µg/10^6 cells	Mouse splenocytes

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

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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