Human CD300c Alexa Fluor® 594-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2799A
Catalog Number: FAB3256T
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human CD300c in direct ELISA. In direct ELISAs, no cross-reactivity with Human CD300a, CD300e, CD300LG and Mouse CD300c was detected
Source	Recombinant Monoclonal Rabbit IgG Clone # 2799A
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0-derived human CD300c protein Met29-Arg183 Accession # Q08708
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide *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.*

Flow Cytometry	Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was Human PBMC.

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

Leukocyte mono-Ig-like receptor 2 (LMIR2; also CMRF-35, CMRF35-A antigen, and CD300c antigen) is a 23 kDa (predicted) type I transmembrane glycoprotein that belongs to the immunoregulatory signaling (IRS) family of molecules within the immunoglobulin (Ig) superfamily (1-4). Human LMIR2 is synthesized as a 224 amino acid (aa) precursor that has a 20 aa signal sequence, a 163 aa extracellular domain (ECD), a 21 aa transmembrane region, and a 20 aa cytoplasmic tail (SwissProt # Q08708). The ECD contains an Ig-like V-type domain (aa's 22-128) and two N-linked glycosylation sites (aa's 90 and 99). Downstream of the Ig V-domain, the membrane proximal region of LMIR2 (aa 128-183) contains a high proportion of proline (18%), serine (20%) and threonine (13%) residues (1). The transmembrane segment contains a charged glutamic acid that contributes to cell activation (1-3). Human LMIR2 shares 52% aa sequence identity with the mouse LMIR2, which is also known as CLM4. Human LMIR2 is 90% identical to human LMIR1 within the Ig-like domain. LMIR2 is present on the surface of natural killer cells, granulocytes, most myeloid cells, dendritic cells, and a subpopulation of T and B lymphocytes (1, 3). Mouse LMIR2 has the characteristics of an activatory molecule capable of inducing cellular activation and effector function in most cells and macrophages (3). The ligand for LMIR2 is presently unknown.

References:

1. Jackson, D.G. *et al.* (1992) Eur. J. Immunol. **22**:1157.
2. Clark, G.J. *et al.* (2001) Tissue Antigens **57**:415.
3. Clark, G.J. *et al.* (2002) J. Biol. Regul. Homeost. Agents **16**:233.
4. Daish, A. *et al.* (1993) Immunology **79**:55.

PRODUCT SPECIFIC NOTICES

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