

DESCRIPTION

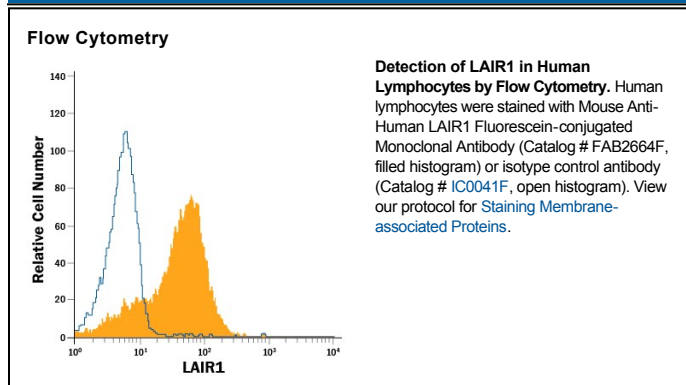
Species Reactivity	Human
Specificity	Detects human LAIR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human LAIR2 or recombinant mouse LAIR1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 342219
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LAIR1 isoform 1 Gln22-His163 Accession # Q6GTX8
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied 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	10 μ L/10 ⁶ cells	See Below

DATA



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

LAIR1 (Leukocyte-associated Ig Like Receptor 1) is an inhibitory receptor belonging to the Ig superfamily. It is a 40 kDa type I transmembrane glycoprotein with one extracellular C2-type Ig-like domain and two cytoplasmic ITIMs. Four LAIR1 splice variants exist. LAIR1b has a 17 aa deletion outside the Ig loop in the extracellular domain. It differs from LAIR1c by one aa residue. LAIR1d has a 77 aa truncation in the cytoplasmic domain. LAIR1 is expressed on NK cells, T cells, B cells, monocytes, dendritic cells and most thymocytes. Consistent with the presence of ITIM motifs, LAIR1 inhibits IL-2 and IFN- γ production by CD4⁺ T cells, and reduces IgG and IgE production by B cells. LAIR1 is known to bind to collagens -I, -II, -III, and XVII. The extracellular domain of human LAIR1 shares 40% aa identity with that of the mouse protein.