

Monoclonal anti-human LAIR-1 antibody (clone lc12)

Mouse IgG₁, κ

Cat. No. AKR3007

Size : 100 μl

Immunogen Recombinant human LAIR-1 protein

Isotype Mouse IgG₁ heavy chains and κ light chains

Clone Anti-Hu LAIR-1 mAb, clone lc12, is derived from hybridization of mouse SP2/O myeloma cells with spleen cells from BALB/c mice immunized with a recombinant extracellular domain(22-125aa) of LAIR-1.

Form Liquid. Supplied in phosphate buffered saline, pH 7.4, 0.2 μm filtered.

DESCRIPTION

Reacts with extracellular domain of the LAIR-1, a member of the leukocyte-associated Ig like receptor family. The LAIR-1 is a transmembrane glycoprotein(~32kDa) expressed on the majority of human peripheral blood mononuclear leukocytes including T cells, B cells, NK cells, macrophages and dendritic cells^{1,2}. LAIR-1 recruits SHP-1 and SHP-2 tyrosine phosphatases upon activation, and cross-linking of the LAIR-1 molecule on NK cells results in strong inhibition of NK cell-mediated cytotoxicity¹.

PREPARATION AND STORAGE

The antibody was purified from hybridoma culture supernatant by Protein G affinity chromatography. Store at 4°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

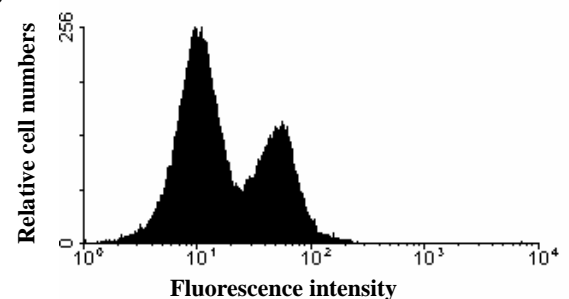
USAGE

Applications include flow cytometry, ELISA and western blot analysis.

The antibody has been tested by immunofluorescent staining with flow cytometric analysis and by Western blot analysis to assure specificity and reactivity.¹

Since application vary, however, each investigation should titrate the reagent to obtain optimal results.

* Note: this product is routinely tested on peripheral blood mononuclear cells(PBMCs) or natural killer(NK) cells. The histogram is an example of the expected reactivity.



Profile of LAIR-1 positive PBMC cells analyzed by flow cytometry.

ELISA

LAIR-1	KIR2DL1	KIR2DL3	KIR2DS4
+++	—	—	—

Western blotting

LAIR-1	KIR2DL1	KIR2DL3	KIR2DS4
+++	—	—	—

REFERENCES

1. Meyaard L, Adema GJ, Chang C, Woollatt E, Sutherland GR, Lanier LL, Phillips JH. 1997. LAIR-1, a novel inhibitory receptor expressed on human mononuclear leukocytes. *Immunity* 7: 283-290.
2. Meyaard L, Hurenkamp J, Clevers H, Lanier LL, Phillips JH. 1999. Leukocyte-associated Ig-like receptor-1 functions as an inhibitory receptor on cytotoxic T cells. *J. Immunol.* 162: 5800-5804.

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