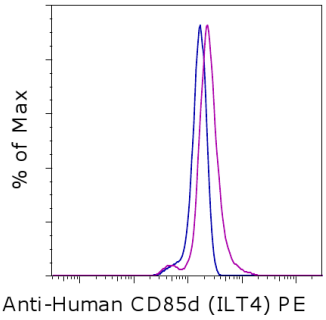
Anti-Human CD85d (ILT4) PE

Catalog Number: 12-5149
Also known as: LIR2, LILRB2, MIR10
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Rat IgG2a K Isotype Control PE (cat. 12-4321) (blue histogram) or Anti-Human CD85d (ILT4) PE (purple histogram). Cells in the monocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD85d (ILT4) PE
REF **Catalog Number:** 12-5149
Clone: 42D1
Concentration: 5 uL (1 ug)/test
Host/Isotype: Rat IgG2a

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

The monoclonal antibody 42D1 recognizes the CD85d protein also known as ILT4, LIR-2. It is a member of the ILT (immunoglobulin-like transcript)/ LIR (leukocyte Ig-like receptor), MIR (monocytes Ig-like receptor) family. CD85d is a 110 kDa single transmembrane receptor with 3 Ig-like domains and a long cytoplasmic domain containing ITIMs (immunoreceptor tyrosine-based inhibitory motifs). Expression is confined to monocytes, macrophages and dendritic cells. The ligand for CD85d is non-classical class I HLA-G, -B and G1. Upon ligand binding, tyrosine phosphatase SHP-1 interacts with the ITIM. Interaction of HLA-G with ILT4/CD85d is thought to contribute to tolerance during fetal implantation. Additionally, it is the levels of ILT3 and ILT4 on DCs that suggests a role in organ allograft rejection.

Crosslinking of the receptor with the monoclonal antibody 42D1 inhibits calcium flux as well as enhancing HLA-G tetramer staining and restoring the stimulating activity of tolerogenic DC.

Applications Reported

This 42D1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 42D1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (1 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

References

Colonna M, Samaridis J, Cella M, Angman L, Allen RL, O'Callaghan CA, Dunbar R, Ogg GS, Cerundolo V, Rolink A.Human myelomonocytic cells express an inhibitory receptor for classical and nonclassical MHC class I molecules. J Immunol. 1998 Apr 1;160(7):3096-100.

Allan DS, Colonna M, Lanier LL, Churakova TD, Abrams JS, Ellis SA, McMichael AJ, Braud VM. Tetrameric complexes of human histocompatibility leukocyte antigen (HLA)-G bind to peripheral blood myelomonocytic cells. J

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Exp Med. 1999 Apr 5;189(7):1149-56.

Colonna M, Nakajima H, Navarro F, López-Botet M.A novel family of Ig-like receptors for HLA class I molecules that modulate function of lymphoid and myeloid cells. J Leukoc Biol. 1999 Sep;66(3):375-81

Manavalan JS, Rossi PC, Vlad G, Piazza F, Yarilina A, Cortesini R, Mancini D, Suciu-Foca N. High expression of ILT3 and ILT4 is a general feature of tolerogenic dendritic cells. Transpl Immunol. 2003 Jul-Sep;11(3-4):245-58. (42D1, FA,FC, PubMed)

Related Products
12-4321 Rat IgG2a K Isotype Control PE (eBR2a)
17-0149 Anti-Human CD14 APC (61D3)

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