# Anti-Human CD185 (J252D4)





#### 1. PRODUCT DESCRIPTION

- Clone: J252D4;
- Isotype: Mouse IgGl, k;
- Tested application: flow cytometry (Quality tested);
- Immunogen: Human CXCR5-transfected cells;
- Species reactivity: Human;
- Storage instruction: store in the dark at 2-8 °C;
- Storage buffer: aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);
- Recommended usage: Immunostep's anti-human CDI85, clone J252D4, is a monoclonal antibody intended for the identification of cells expressing CXCR5 protein in peripheral blood using a compatible flow cytometer. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells or 100 µl of sample;
- Presentation: liquid;
- Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
- Purification: Affinity chromatography;
- Other names: CXCR5, BLR1, MDR15;
- Gene ID: 643.

### 2. ANTIGEN DETAILS

Large description: CDI85, a 42 kD G-protein coupled receptor with seven transmembrane regions. CXCR5 is expressed by mature B cells, follicular helper T cells, Burkitt's lymphoma cells, and a subset of neurons. It plays a crucial role in directing cell migration to the B cell follicles within secondary lymphoid organs, which are key sites for initiating immune responses.

The ligand for the CXCR5 chemokine receptor is CXCLI3 (also known as B-lymphocyte chemoattractant or BLC). CXCR5 plays an important role in the positioning and cognate interactions of B-cell chronic lymphocytic leukemia (CLL) cells with CXCLI3-secreting CD68+ accessory cells within the lymphoid tissues. This interaction helps support the survival and proliferation of CLL cells in their protective microenvironment.<sup>(II)</sup>

The high expression of CXCR5 on T follicular helper cells (T(FH)) and a subset of central memory CD4 T cells (T(CM)), suggesting that CXCR5(+) T(CM) may function similarly to T(FH) cells in supporting humoral immune responses. CXCR5(+) T(CM) exhibit B cell helper qualities, expressing high levels of CXCL13, inducing plasma cell differentiation and Ig secretion, and showing responsiveness to ICOS ligand costimulation and IL-10 secretion. These attributes are acquired through interaction with B cells, indicating a specialized role in promoting quick and efficient secondary humoral immune responses. In conclusion, CXCR5(+) T(CM) are proposed as a distinct memory cell subset specialized in supporting antibody-mediated immune responses<sup>(2)</sup>.

# 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

# ADDITIONAL INFORMATION

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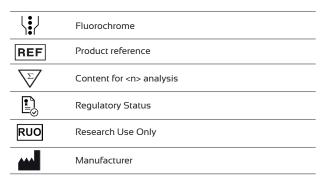
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# REFERENCES

- Bürkle A, Niedermeier M, Schmitt-Gräff A, Wierda WG, Keating MJ, Burger JA. Overexpression of the CXCR5 chemokine receptor, and its ligand, CXCL13 in B-cell chronic lymphocytic leukemia. Blood. 2007 Nov 1;110(9):3316-25. doi: 10.1182/ blood-2007-05-089409. Epub 2007 Jul 25. PMID: 17652619.
- Chevalier N, Jarrossay D, Ho E, Avery DT, Ma CS, Yu D, Sallusto F, Tangye SG, Mackay CR. CXCR5 expressing human central memory CD4 T cells and their relevance for humoral immune responses. J Immunol. 2011 May 15;186(10):5556-68. doi: 10.4049/ jimmunol.1002828. Epub 2011 Apr 6. PMID: 21471443.

#### 6. EXPLANATION OF SYMBOLS



### MANUFACTURED BY: IMMUNOSTEP S.L.



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