FITC Conjugated Anti-Human CD5 Antibody [PSH05-01] HA720211F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human FC
Applications: Molecular Wt:	Predicted band size: 55 kDa
Clone number:	PSH05-01
Description:	CD5 is a cluster of differentiation expressed on the surface of T cells (various species) and in a subset of murine B cells known as B-1a. The expression of this receptor in human B cells has been a controversial topic and to date there is no consensus regarding the role of this receptor as a marker of human B cells. B-1 cells have limited diversity of their B-cell receptor due to their lack of the enzyme terminal deoxynucleotidyl transferase (TdT) and are potentially self-reactive. CD5 serves to mitigate activating signals from the BCR so that the B-1 cells can only be activated by very strong stimuli (such as bacterial proteins) and not by normal tissue proteins. CD5 was used as a T-cell marker until monoclonal antibodies against CD3 were developed. In humans, the gene is located on the long arm of chromosome 11. There is no confirmed ligand for CD5 but there is evidence that CD72, a C- type lectin, may be a ligand or that CD5 may be homophilic, binding CD5 on the surface of other cells. CD5 includes a scavenger receptor cysteine-rich protein domain. T cells express higher levels of CD5 than B cells. CD5 is upregulated on T cells upon strong activation. In the thymus, there is a correlation with CD5 expression and strength of the interaction of the T cell towards self-peptides.
Conjugate:	FITC-conjugated
lmmunogen:	Recombinant protein within human CD5 aa 25-372 / 495.
Positive control:	Human peripheral blood.
Subcellular location:	Cell membrane.
Database links:	SwissProt: P06127 Human
Recommended Dilutions: FC	5 μl per million cells in 100 μl staining volume or 5 μl per 100 μl of whole blood.
Storage Buffer:	Supplied in phosphate-buffered solution, pH 7.2, containing 0.2% ProClean 950 and BSA.
Storage Instruction:	Store at 2 $^\circ\!\!\mathbb{C}$ to 8 $^\circ\!\!\mathbb{C}$. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

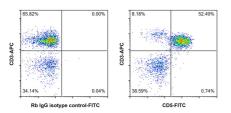


Fig1: Flow cytometry analysis of human peripheral blood labelling Human CD5 (HA720211F, FITC).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. He M et al. CD5 expression by dendritic cells directs T cell immunity and sustains immunotherapy responses. Science. 2023 Feb
- 2. Durani U et al. CD5+ diffuse large B-cell lymphoma: a narrative review. Leuk Lymphoma. 2021 Dec

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