

ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE)

Package: 100 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [BA5b] recognizes CD26 / DPP4
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone BA5b recognizes CD26, a 110 kDa type II membrane glycoprotein, which is a peptidase expressed on mature thymocytes, T cells (especially activated), B cells, NK cells and macrophages. HLDA VI; WS Code N-L078
Host	Mouse
Clonality	Monoclonal
Clone	BA5b
Isotype	IgG2a
Target Name	CD26 / DPP4
Species	Human
Immunogen	A human T cell clone
Conjugation	PE
Alternate Names	T-cell activation antigen CD26; ADCP2; ADCP-2; DPP IV; Adenosine deaminase complexing protein 2; CD26; EC 3.4.14.5; ADABP; Dipeptidyl peptidase IV soluble form; Dipeptidyl peptidase IV; Dipeptidyl peptidase 4; Dipeptidyl peptidase IV membrane form; TP103; DPPIV; CD antigen CD26

Application Instructions

Application table	Application	Dilution
	FACS	20 µl / 10 ⁶ cells

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

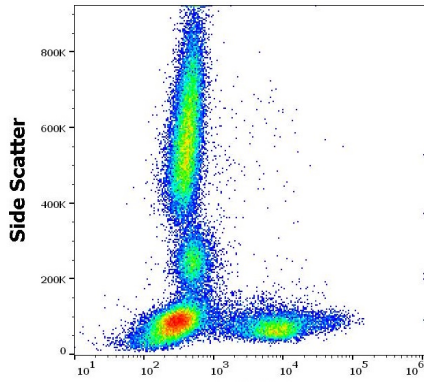
Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

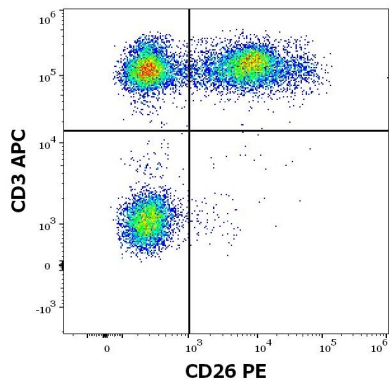
Bioinformation

Database links	GeneID: 1803 Human Swiss-port # P27487 Human
Gene Symbol	DPP4
Gene Full Name	dipeptidyl-peptidase 4
Background	CD26, also known as dipeptidyl peptidase IV (DPP-IV), is a homodimeric cell surface serine peptidase that degrades IFN-gamma-induced cytokines, acts as a T cell costimulatory molecule, and participates in multiple immunopathological roles in leukocyte homing and inflammation. Alterations in its peptidase activity are characteristic of malignant transformation. The enzymatic activity increases dramatically with tumour grade and severity. CD26 is expressed in various blood cell types, but also e.g. in cells that are histogenetically related to activated fibroblasts. Alterations in CD26 density have been reported on circulating monocytes and CD4+ T cells during rheumatoid arthritis and systemic lupus erythematosus.
Function	Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Immune System antibody; Metabolism antibody
Calculated Mw	88 kDa
PTM	The soluble form (Dipeptidyl peptidase 4 soluble form also named SDPP) derives from the membrane form (Dipeptidyl peptidase 4 membrane form also named MDPP) by proteolytic processing. N- and O-Glycosylated. Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell activation.



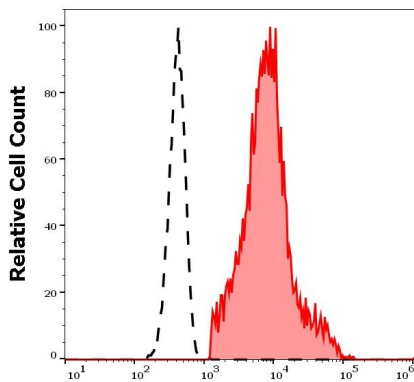
ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) (20 µl reagent / 100 µl of peripheral whole blood).



ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) FACS image

Flow Cytometry: Human lymphocytes stained with ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) (20 µl reagent / 100 µl of peripheral whole blood) and [ARG54302](#) anti-CD3 antibody [UCHT1] (APC) (10 µl reagent / 10⁶ cells in 100 µl of cell suspension).



ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) FACS image

Flow Cytometry: Separation of human CD26 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG53803 anti-CD26 / DPP4 antibody [BA5b] (PE) (20 µl reagent / 100 µl of peripheral whole blood).