

# Product datasheet

info@arigobio.com

# ARG62789 anti-CD26 / DPP4 antibody [BA5b] (FITC)

Package: 100 tests Store at: 4°C

## Summary

Isotype

Product Description FITC-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

Target Name CD26 / DPP4

Species Human

Immunogen A human T cell clone

IgG2a

Conjugation FITC

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
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Purification Note The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions.

The reagent is free of unconjugated FITC 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.

#### Bioinformation

Database links <u>GeneID: 1803 Human</u>

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 degradates 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

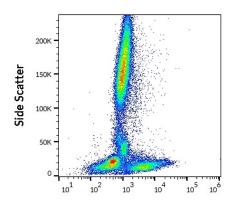
PTM The soluble form (Dipeptidyl peptidase 4 soluble form also named SDPP) derives from the membrane

form (Dipeptidyl peptidase 4 membrane form also named MDPP) by proteolytic processing.

N- and O-Glycosylated.

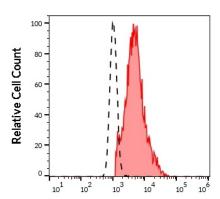
Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell

activation.



### ARG62789 anti-CD26 / DPP4 antibody [BA5b] (FITC) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62789 anti-CD26 / DPP4 antibody [BA5b] (FITC) (10  $\mu l$  reagent / 100  $\mu l$  of peripheral whole blood).



#### ARG62789 anti-CD26 / DPP4 antibody [BA5b] (FITC) FACS image

Flow Cytometry: Separation of human CD26 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed), Human peripheral whole blood stained with ARG62789 anti-CD26 / DPP4 antibody [BA5b] (FITC) (10  $\mu l$  reagent / 100  $\mu l$  of peripheral whole blood).