

anti-Human CD294 Antibody | anti-CD294 antibody

Anti-Hu CD294 PE

CATALOG # AAA129274	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay
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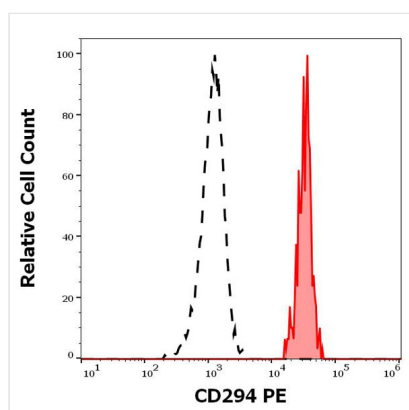
PRODUCT SYNONYMS

CD294; Anti-Hu CD294 PE; prostaglandin D2 receptor 2; DP2; PTGDR2; DL1R; CRTH2; GPR44; anti-CD294 antibody

PRODUCT SPECIFICATIONS

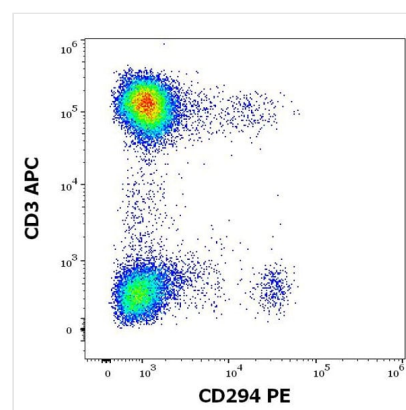
Reactivity	Human
Isotype	Rat IgG2a
Clone Number	BM16
Specificity	The rat monoclonal antibody BM16 recognizes an extracellular epitope of CD294/CRTH2 (prostaglandin D2 receptor 2), a G-protein-coupled seven-transmembrane protein expressed on Th2 cells, peripheral blood basophils and eosinophils.
Form/Format	PE Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography. Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Applicable Applications for anti-CD294 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Human CD294 transfected rat cell line TART/B19-12.10
Preparation and Storage	Store at 2-8 degree C. Protect from prolonged exposure to light. Do not freeze.

IMAGES



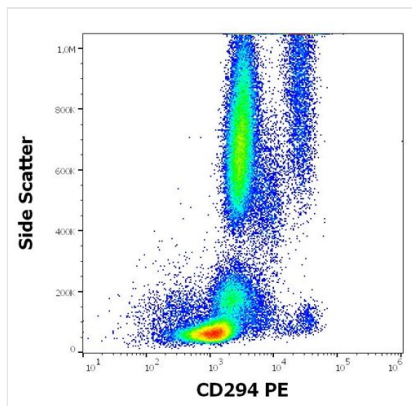
FCM/FACS (Flow Cytometry)

Separation of human CD294 positive basophils (red-filled) from CD3 positive CD294 negative T cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD294 (BM16) PE antibody (10 ?l reagent / 100 ?l of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry multicolor surface staining of human gated lymphocytes and basophils stained using anti-human CD3 (UCHT1) APC antibody (10 ?l reagent / 100 ?l of peripheral whole blood) and anti-human CD294 (BM16) PE antibody (10 ?l reagent / 100 ?l of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD294 (BM16) PE antibody (10 µl reagent / 100 µl of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD294 antibody	CD294 (prostaglandin D2 receptor 2) is a G-protein-coupled receptor that is preferentially expressed in CD4+ effector T helper 2 (Th2) cells, but also on eosinophils and basophils. It mediates the pro-inflammatory chemotaxis of eosinophils, basophils, and Th2 lymphocytes generated during allergic inflammation. Single nucleotide polymorphisms in the 3' UTR of CD294 gene have been associated with asthma susceptibility. Outside the immune system CD294 is expressed e.g. in gut, heart, and brain. The intracellular C terminal tail contains sites for phosphorylation by protein kinase C.
References	*De Fanis U, Mori F, Kurnat RJ, Lee WK, Bova M, Adkinson NF, Casolaro V: GATA3 up-regulation associated with surface expression of CD294/CRTH2: a unique feature of human Th cells. GATA3 up-regulation associated with surface expression of CD294/CRTH2: a unique feature of human Th cells. Blood. 2007 May 15;109(10):4343-50. Epub 2007 Jan 18., URL: https://pubmed.ncbi.nlm.nih.gov/17234745/, *Mjösberg J, Bernink J, Golebski K, Karrich JJ, Peters CP, Blom B, te Velde AA, Fokkens WJ, van Drunen CM, Spits H: The transcription factor GATA3 is essential for the function of human type 2 innate lymphoid cells. Immunity. 2012 Oct 19;37(4):649-59., URL: https://pubmed.ncbi.nlm.nih.gov/23063330/, *Bellinghausen I, Reuter S, Martin H, Maxeiner J, Luxemburger U, Türeci Ö, Grabbe S, Taube C, Saloga J: Enhanced production of CCL18 by tolerogenic dendritic cells is associated with inhibition of allergic airway reactivity. J Allergy Clin Immunol. 2012 Dec;130(6):1384-93., URL: http://www.ncbi.nlm.nih.gov/pubmed/23102918, *Nagata K, Tanaka K, Ogawa K, Kemmotsu K, Imai T, Yoshie O, Abe H, Tada K, Nakamura M, Sugamura K, Takano S: Selective expression of a novel surface molecule by human Th2 cells in vivo. J Immunol. 1999 Feb 1;162(3):1278-86., URL: http://www.ncbi.nlm.nih.gov/pubmed/9973380,

NCBI AND UNIPROT INFORMATION

NCBI GI #	153791424
NCBI GeneID	11251
NCBI Accession #	NP_004769
NCBI GenBank Nucleotide #	NM_004778.2
UniProt Accession #	Q9Y5Y4; O94765; Q4QRI6
Molecular Weight	Predicted: 43, 55 kDa Observed: 60kDa
NCBI Official Full Name	prostaglandin D2 receptor 2
NCBI Official Synonym Full Names	prostaglandin D2 receptor 2
NCBI Official Symbol	PTGDR2
NCBI Official Synonym Symbols	DP2; DL1R; CD294; CRTH2; GPR44

NCBI Protein Information	prostaglandin D2 receptor 2; G protein-coupled receptor 44; G-protein coupled receptor 44; putative G-protein coupled receptor 44; chemoattractant receptor-homologous molecule expressed on TH2 cells; chemoattractant receptor homologous molecule expressed
UniProt Protein Name	Prostaglandin D2 receptor 2
UniProt Gene Name	PTGDR2
UniProt Synonym Gene Names	CRTH2; DL1R; GPR44
UniProt Entry Name	PD2R2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/human-antibody/cd294/129274>