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Product datasheet for TA329066

VIP Receptor 1 (VIPR1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)EEAQLENETIG(S)SK, corresponding to amino acid residues 52-65 of human VPAC1 (Accession P32241). Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	vasoactive intestinal peptide receptor 1
Database Link:	NP_004615 Entrez Gene 22354 MouseEntrez Gene 24875 RatEntrez Gene 7433 Human P32241

View online »

Background: Vasointestinal peptide (VIP) and pituitary adenylate cyclase–activating peptide (PACAP) belong to the glucagon hormone superfamily, which includes secretin, growth hormone–releasing hormone (GHRH), glucagon, glucagon-like peptides 1 and 2 (GLP-1 and GLP-2), peptide histidine methionine (PHM), and glucose-dependent insulinotropic polypeptide (GIP). PACAP and VIP effects have been described in the digestive tract, cardiovascular system, airways, reproductive system, immune system, endocrine glands, and brain. VIP and PACAP share a common G-protein coupled receptor, VPAC1. VPAC1 is a membrane-associated protein and shares significant homology with members of the G-protein coupled class B receptor family, the most important of which is the presence of large N-terminal extracellular domains which contain 10 highly conserved amino acids including six cysteines, putative N-terminal leader sequences and several potential N-glycosylation sites. In the CNS, VPAC1 receptors are abundantly localized in piriform cortex, cerebral cortex, suprachiasmatic nucleus, hippocampus, and pineal gland. In peripheral tissues, VPAC1 receptors have been found in breast, kidney, liver, lung, prostate, spleen, and mucosa of the gastrointestinal tract. VPAC1 mediates a large array of VIP and PACAP actions on exocrine secretion, hormones release, muscle relaxation, metabolism, fetus growth, tumor cells and embryonic brain development.

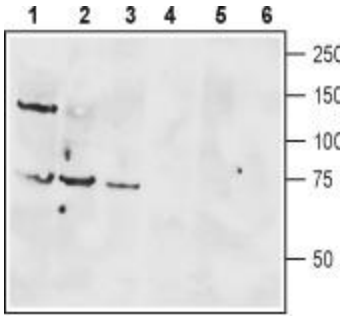
Synonyms: HVR1; II; PACAP-R-2; PACAP-R2; RDC1; V1RG; VAPC1; VIP-R-1; VIPR; VIRG; VPAC1; VPAC1R; VPCAP1R

Note: This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

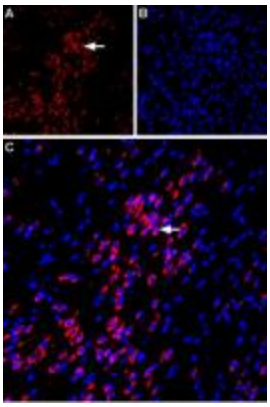
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

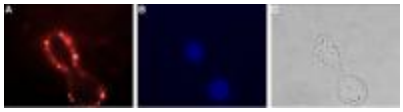
Product images:



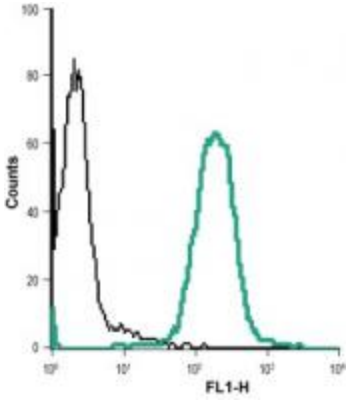
Western blot analysis of rat brain lysate (lanes 1 and 4), mouse brain membranes (lanes 2 and 5) and human Jurkat T cell leukemia cell lysate (lanes 3 and 6): 1-3. Anti-VPAC1 (extracellular) antibody, (1:400). 4-6. Anti-VPAC1 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of VPAC1 in rat amygdala. Immunohistochemical staining of immersion-fixed, free floating rat brain frozen sections using Anti-VPAC1 (extracellular) antibody, (1:100). A. VPAC1 staining (red) is apparent in basolateral amygdala neurons (horizontal arrow). B. Cell nuclei in the same section are stained with DAPI (Blue). C. Merge of the two images.



Expression of VPAC1 in human HT-29 cells. Immunocytochemical staining of live intact human HT-29 colorectal adenocarcinoma cells. A. Extracellular staining of live cells with Anti-VPAC1 (extracellular) antibody, (1:25), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). B. Cell nuclei were visualized using Hoechst 33342 (blue). C. Live view of the cells.



Indirect flow cytometry analysis of live intact Jurkat (human T cell leukemia cells) cell line: black line Cells + goat-anti-rabbit-DyLight-488. Green line Cells + Anti-VPAC1 (extracellular) antibody, (1:20) + goat-anti-rabbit-DyLight-488.