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Anti-VIP Receptor 1 Picoband Antibody
Catalog # ABO13028

Specification

Anti-VIP Receptor 1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P32241
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for VIP Receptor 1 detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-VIP Receptor 1 Picoband Antibody - Additional Information

Gene ID 7433

Other Names
Vasoactive intestinal polypeptide receptor 1, VIP-R-1, Pituitary adenylate cyclase-activating polypeptide type II receptor, PACAP type II receptor, PACAP-R-2, PACAP-R2, VPAC1, VIPR1

Application Details
Western blot, 0.1-0.5 µg/ml

Subcellular Localization
Cell membrane; Multi-pass membrane protein.

Tissue Specificity
In lung, HT-29 colonic epithelial cells, Raji B-lymphoblasts. Lesser extent in brain, heart, kidney, liver and placenta. Not expressed in CD4+ or CD8+ T-cells. Expressed in the T-cell lines HARRIS, HuT 78, Jurkat and SUP-T1, but not in the T- cell lines Peer, MOLT-4, HSB and YT.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
A synthetic peptide corresponding to a sequence of human VIP Receptor 1 (QAELRRKWRRWHLQGVLGWNPKYRH).

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be**

aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.

Anti-VIP Receptor 1 Picoband Antibody - Protein Information

Name VIPR1 (HGNC:12694)

Function
G protein-coupled receptor activated by the neuropeptides vasoactive intestinal peptide (VIP) and pituitary adenylate cyclase- activating polypeptide (ADCYAP1/PACAP) (PubMed:35477937, PubMed:36385145, PubMed:8179610). Binds VIP and both PACAP27 and PACAP38 bioactive peptides with the following order of ligand affinity VIP = PACAP27 > PACAP38 (PubMed:35477937, PubMed:8179610). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors. Activates cAMP-dependent pathway (PubMed:35477937, PubMed:36385145, PubMed:8179610).

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
In lung, HT-29 colonic epithelial cells, Raji B- lymphoblasts. Lesser extent in brain, heart, kidney, liver and placenta. Not expressed in CD4+ or CD8+ T-cells. Expressed in the T- cell lines HARRIS, HuT 78, Jurkat and SUP-T1, but not in the T-cell lines Peer, MOLT-4, HSB and YT.

Anti-VIP Receptor 1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-VIP Receptor 1 Picoband Antibody - Images

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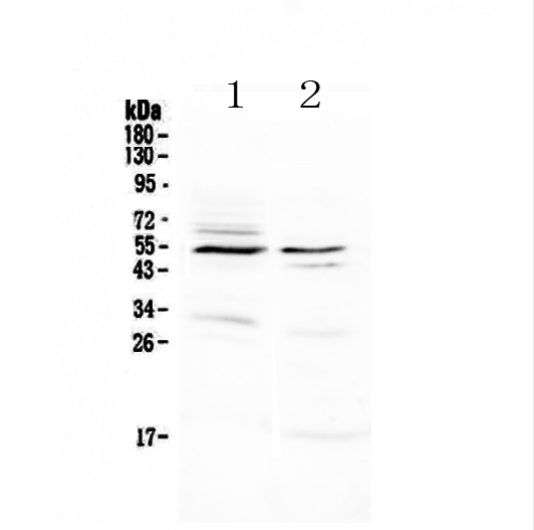

Figure 1. Western blot analysis of VIP Receptor 1 using anti-VIP Receptor 1 antibody (ABO13028).

Anti-VIP Receptor 1 Picoband Antibody - Background

VIPR1(Vasoactive intestinal polypeptide receptor 1),also known as VIPR,HVR1, is a protein that in humans is encoded by the VIPR1 gene. Distinct subsets of neural, respiratory, gastrointestinal, and immune cells bear specific high-affinity G protein-coupled receptors for VIP, such as VIPR1. The VIPR1 gene is mapped on 3p22.1. The VIPR1 gene was found to span approximately 22 kb and to be comprised of 13 exons (ranging from 42 to 1,400 bp) and 12 introns (ranging from 0.3 to 6.1 kb). One encodes a VIP receptor consisting of 460 amino acids and having 7 putative transmembrane domains, as do other G protein-coupled receptors. Patients with idiopathic achalasia show a significant difference in the distribution of SNPs affecting VIPR1.