

Product Specification Sheet

VIP Receptor 2 Antibodies

Cat. # VIPR22-M

Mouse Monoclonal Anti-Rat VIPR2 IgG #2, aff pure

SIZE: 100 ug

Vasoactive intestinal peptide (VIP) is a 28-aminoacid peptide (human, chr 6q26-q27). Expressed and secreted by neurons innervating primary and secondary immune organs such as lymph nodes with a Mol.wt of 20kD. VIP is a potent neurotrophic factor causes vasodilation, lowers arterial blood pressure, and relaxes the smooth muscle of trachea, stomach and gall bladder. VIP also modulates several T-lymphocyte activities including motility, cytokine production, proliferation and apoptosis, VIP exerts its biological activity by binding to two closely related class II G-protein-coupled receptors VPAC-1 and VPAC-2 beside this VIP has its own receptors **VIPR1&2** (Vasoactive Intestinal Polypeptide Receptor 1&2) and **VIPRRP** (VIP receptor-gene repressor protein). VIP shows similarities to glucagon, secretin and gastric inhibitory peptide (GIP) as such it has been considered a member of the glucagon-secretin family. The VIP is 100% conserved in mouse, rat and human. VIP is considered to be a viable candidate for the development of treatments for rheumatoid arthritis, since treatment with VIP significantly reduced incidence of severity of arthritis, the therapeutic effect of VIP was associated with downregulation of both inflammatory and autoimmune components of the disease.

VIPR2, a 438aa (chr.7q36.3) protein in human (437aa in rat and mouse). The VIP receptor2 is also termed as type III PACAP receptor, mainly expressed in neural tissues. This is a receptor for VIP as well as PACAP 38 and 27, G proteins mediate the activity of this receptor, which activates adeny cyclase and can be coupled to phospholipase C. It shows 86% sequence homology with rat VIPR2.

Source of Antigen and Antibodies

Antigen	A unique peptide from rat VIPR2 (1)
Ab Host/type	Mouse, Monoclonal, IgG1;
Ab Format	Aff pure IgG (cat # VIPR22-M) in PBS pH 7.4, 0.05% sodium azide supplied at 100 ug/ml, or in lyophilized (reconstitute in 100 ul PBS for 100 ug/100 ul solution
2-ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution
50 ug/50 ul lyophilized powder
Buffer: PBS, pH 7.5, 0.05% sodium azide
Reconstitute powder in the original vol. of water

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: (1-5 ug/ml using ECL technique).

ELISA: Control antigen can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: We recommend the 4%PF fixed tissues followed by 0.1% Triton X-100 treatment. .

Specificity & Cross-reactivity

Antibody cross-reactivity in various other species has not been studied.

General References: (1) Lin Pei (1998), JBC,273, 19902-19908; Lin pei(2000) JBC, 275, 1176-1182; Bodner,M (1985) PNA,82, 3548-3551; Delgado, M (2001) Nature Med, 7, 563-568; Gotoh, E.(1998) Biochem. Int, 17, 555-562.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies and Peptides: VIP, VIPRRP, Glucagon, GLP.

VIPR22-M 71208A

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com