

VIP (H-6): sc-25347

BACKGROUND

Glucagon is a pancreatic hormone that functions as an antagonist to Insulin, stimulating the conversion of glycogen to glucose and increasing blood sugar levels. Glucagon-like peptide-1 (GLP-1), glucagon-like peptide-2 (GLP-2), VIP (vasoactive intestinal peptide) and PACAP (pituitary adenylate cyclase activating polypeptide) are members of the glucagon family of hormones. GLP-1 functions as a transmitter in the central nervous system, inhibiting feeding and drinking behavior, whereas GLP-2 is a stimulator of intestinal epithelial growth. VIP causes vasodilation resulting in the lowering of blood pressure. PACAP is abundant in the hypothalamus and has been shown to increase the synthesis of several hormones, including growth hormone.

CHROMOSOMAL LOCATION

Genetic locus: VIP (human) mapping to 6q25.2.

SOURCE

VIP (H-6) is a mouse monoclonal antibody raised against amino acids 1-95 of vasoactive intestinal peptide (VIP) of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VIP (H-6) is available conjugated to agarose (sc-25347 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-25347 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25347 PE), fluorescein (sc-25347 FITC), Alexa Fluor[®] 488 (sc-25347 AF488), Alexa Fluor[®] 546 (sc-25347 AF546), Alexa Fluor[®] 594 (sc-25347 AF594) or Alexa Fluor[®] 647 (sc-25347 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-25347 AF680) or Alexa Fluor[®] 790 (sc-25347 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

VIP (H-6) is recommended for detection of VIP of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VIP siRNA (h): sc-39521, VIP shRNA Plasmid (h): sc-39521-SH and VIP shRNA (h) Lentiviral Particles: sc-39521-V.

Molecular Weight of VIP: 20 kDa.

Positive Controls: human colon extract: sc-363757 or SK-N-SH cell lysate: sc-2410.

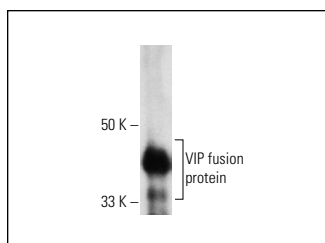
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

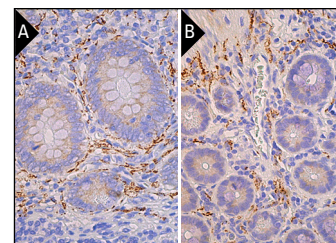
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



VIP (H-6): sc-25347. Western blot analysis of human recombinant VIP fusion protein.



VIP (H-6): sc-25347. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing extracellular localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing extracellular staining (B).

SELECT PRODUCT CITATIONS

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- Jaafari, N., et al. 2008. Qualitative and quantitative analysis of tachykinin NK2 receptors in chemically defined human colonic neuronal pathways. *J. Comp. Neurol.* 507: 1542-1558.
- Mammen, A.P. and Jagota, A. 2011. Immunocytochemical evidence for different patterns in daily rhythms of VIP and AVP peptides in the suprachiasmatic nucleus of diurnal *Funambulus palmarum*. *Brain Res.* 1373: 39-47.
- Giunta, S., et al. 2012. Early changes in pituitary adenylate cyclase-activating peptide, vasoactive intestinal peptide and related receptors expression in retina of streptozotocin-induced diabetic rats. *Peptides* 37: 32-39.
- Hinata, N. and Murakami, G. 2014. The urethral rhabdosphincter, levator ani muscle, and perineal membrane: a review. *Biomed. Res. Int.* 2014: 906921.
- Jang, H.S., et al. 2015. Composite nerve fibers in the hypogastric and pelvic splanchnic nerves: an immunohistochemical study using elderly cadavers. *Anat. Cell Biol.* 48: 114-123.
- Coyle, D., et al. 2016. Altered neurotransmitter expression profile in the ganglionic bowel in Hirschsprung's disease. *J. Pediatr. Surg.* 51: 762-769.
- Hosaka, F., et al. 2016. Human nasociliary nerve with special reference to its unique parasympathetic cutaneous innervation. *Anat. Cell Biol.* 49: 132-137.
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PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.