

VIP (M-19): sc-7841

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, ADCYAP1 (human) mapping to 18p11.32; Vip (mouse) mapping to 10 A1, Adcyap1 (mouse) mapping to 17 E5.

SOURCE

VIP (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of VIP of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7841 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VIP (M-19) is recommended for detection of VIP and, to a lesser extent, PACAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VIP (M-19) is also recommended for detection of VIP and, to a lesser extent, PACAP in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of VIP: 20 kDa.

Positive Controls: human colon extract: sc-363757, SK-N-SH cell lysate: sc-2410 or mouse brain extract: sc-2253.

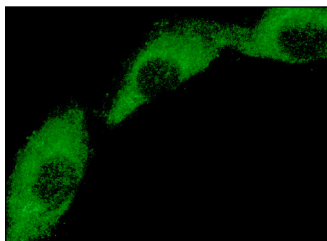
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

DATA



VIP (M-19): sc-7841. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Fukuchi, M., et al. 2004. Calcium signal-mediated expression of the vasoactive intestinal polypeptide gene and its small contribution to activity-dependent survival of mouse cerebellar granule cells. *J. Neurosci. Res.* 77: 26-34.
2. Yu, Q., et al. 2011. Oxytocin is expressed by both intrinsic sensory and secretomotor neurons in the enteric nervous system of guinea pig. *Cell Tissue Res.* 344: 227-237.
3. Csati, A., et al. 2012. Distribution of vasoactive intestinal peptide, pituitary adenylate cyclase-activating peptide, nitric oxide synthase, and their receptors in human and rat sphenopalatine ganglion. *Neuroscience* 202: 158-168.
4. Cork, D.M., et al. 2012. Progesterone receptor (PR) variants exist in breast cancer cells characterised as PR negative. *Tumour Biol.* 33: 2329-2340.
5. Avula, L.R., et al. 2013. Expression and distribution patterns of Mas-related gene receptor subtypes A-H in the mouse intestine: inflammation-induced changes. *Histochem. Cell Biol.* 139: 639-658.
6. Callero, M.A., et al. 2013. Biomarkers of sensitivity to potent and selective antitumor 2-(4-amino-3-methylphenyl)-5-fluorobenzothiazole (5F203) in ovarian cancer. *J. Cell. Biochem.* E-Published.

RESEARCH USE

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



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Try **VIP (H-6): sc-25347**, our highly recommended monoclonal alternative to VIP (M-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **VIP (H-6): sc-25347**.