

## VIP (H-16): sc-21041

### 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.

### REFERENCES

1. Rouille, Y., et al. 1995. Differential processing of proglucagon by the subtilisin-like prohormone convertases PC2 and PC3 to generate either glucagon or glucagon-like peptide. *J. Biol. Chem.* 270: 26488-26496.
2. Moens, K., et al. 1996. Expression and functional activity of glucagon, glucagon-like peptide I, and glucose-dependent insulinotropic peptide receptors in rat pancreatic islet cells. *Diabetes* 45: 257-261.

### CHROMOSOMAL LOCATION

Genetic locus: VIP (human) mapping to 6q25.2; Vip (mouse) mapping to 10 A1.

### SOURCE

VIP (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VIP of human 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-21041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

VIP (H-16) is recommended for detection of VIP 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 (H-16) is also recommended for detection of VIP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VIP siRNA (h): sc-39521, VIP siRNA (m): sc-39537, VIP shRNA Plasmid (h): sc-39521-SH, VIP shRNA Plasmid (m): sc-39537-SH, VIP shRNA (h) Lentiviral Particles: sc-39521-V and VIP shRNA (m) Lentiviral Particles: sc-39537-V.

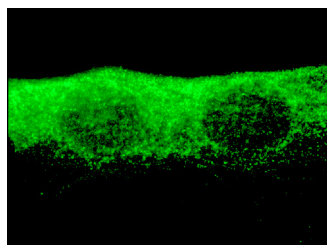
Molecular Weight of VIP: 20 kDa.

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

### 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.

### DATA



VIP (H-16): sc-21041. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing cytoplasmic localization.

### SELECT PRODUCT CITATIONS

1. Guan, X., et al. 2006. GLP-2 receptor localizes to enteric neurons and endocrine cells expressing vasoactive peptides and mediates increased blood flow. *Gastroenterology* 130: 150-164.
2. Noorian, A.R., et al. 2011. Neurochemical phenotypes of myenteric neurons in the rhesus monkey. *J. Comp. Neurol.* 519: 3387-3401.
3. Gabbay-Benziv, R., et al. 2012. Vasoactive intestinal peptide and its receptors in human ovarian cortical follicles. *PLoS ONE* 7: e37015.

### 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.



Try **VIP (H-6): sc-25347**, our highly recommended monoclonal alternative to VIP (H-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **VIP (H-6): sc-25347**.