



NPS (M-17): sc-54247

BACKGROUND

Neuropeptides are regulators of synaptic transmission and their effects are mediated by G protein-coupled receptors. NPS (neuropeptide S) is a 20 amino acid peptide cleaved from a larger precursor that contains a hydrophobic signal peptide and proteolytic cleavage processing sites. The N-terminal residue of NPS is always a serine regardless of the species. NPS is predominantly found in the central nervous system and plays an important role regulating sleep/wake functions, locomotion, arousal/anxiety responses and food intake. NPS functions by binding and activating its receptor, NPSR, and increasing intracellular calcium levels, thereby acting as an excitatory transmitter. In addition, NPS stimulates the hypothalamo-pituitary adrenal (HPA) axis via the release of corticotropin-releasing factor (CRF) and arginine vasopressin (AVP). NPS and its receptor NPSR may also play a role in asthma pathogenesis.

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CHROMOSOMAL LOCATION

Genetic locus: Nps (mouse) mapping to 7.

SOURCE

NPS (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NPS 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-54247 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NPS (M-17) is recommended for detection of NPS of mouse and rat 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).

Molecular Weight of NPS: 10 kDa.

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.

RESEARCH USE

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

PROTOCOLS

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