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Schillerstr. 5

EUD4501 Polyclonal Antibody to Substance P - Serum

Alternate names: Substance-P

Quantity: 50 μl

Background: Substance P occurs in nerve fibers of the central and peripheral nervous system and

in endocrine cells of the gut. It stimulates smooth muscle contraction, gives rise to vasodilation and is involved in sensory functions. Substance P-containing tumors arising in the ileum are often associated with the carcinoid syndrome, characterized by flushing of the skin, diarrhea, bronchoconstriction and sudden drops in blood pressure. Substance P is commonly found in the midgut carcinoids and some of the

symptoms may be related to this peptide.

 Uniprot ID:
 P20366

 NCBI:
 NP 003173

GenelD: <u>6863</u>

Host: Guinea Pig

Immunogen: Substance P conjugated to BSA

Format: State: Lyophilized serum

Reconstitution: Dissolve the antiserum in 50-100 μl distilled water, and dilute further

in 0.1 M PBS with 1% BSA and 0.09% NaN3.

Applications: Immunofluorescence: 1/400-1/800 with overnight incubation at 2-8°C.

Immunohistochemistry on Frozen Sections.
Positive Control: Frozen sections of rat colon.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody reacts to Substance P.

Absorption with 10-100 µg SP and NKA per ml diluted antiserum abolishes the

staining while GRP and NKB do not.

Species: Human, Rat, Rabbit, and Fish (Cod).

Other species not tested.

Storage: Prior to reconstitution store the antibody (undiluted) at 2-8°C.

Following reconstitution store (in aliquots) at -20°C.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Hardebo JE, Suzuki N, Owman C. Origins of substance P- and calcitonin gene-

related peptide-containing nerves in the internal carotid artery of rat. Neurosci Lett.

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2. Witt M et al. Innervation of developing human taste buds. An immunihistochemical

study. Histochem. Cell Bio 109 (3), 281-291 (1998)

3. Shahbazi F, Karila P, Olsson C, Holmgren S, Conlon JM, Jensen J. Primary structure, distribution, and effects on motility of CGRP in the intestine of the cod Gadus morhua.

Am J Physiol. 1998 Jul; 275(1 Pt 2): R19-28. PubMed PMID: 9688955.



- 4. Gölfert F, Witt M, Scheele K, Hofer A, Kasper M, Funk RH. Hints of a functional connection between the neuropeptidergic innervation of arteriovenous anastomoses and the appearance of epithelioid cells in the rabbit ear. Histochem J. 1998 Jun;30(6):435-45. PubMed PMID: 10192543.
- 5. Kressel M, Radespiel-Tröger M. Anterograde tracing and immunohistochemical characterization of potentially mechanosensitive vagal afferents in the esophagus. J Comp Neurol. 1999 Sep 13;412(1):161-72. PubMed PMID: 10440717.