

Mouse Substance P, SP ELISA Kit | SP elisa kit

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CATALOG #
AAA80142

REACTIVITY
Mouse

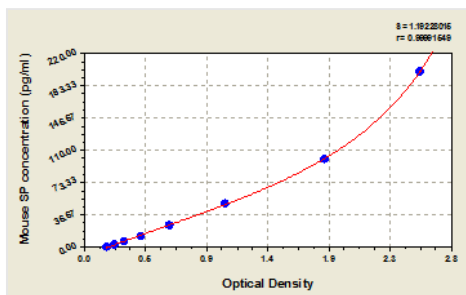
PRODUCT SYNONYMS

Substance P; SP; Mouse Substance P; SP ELISA Kit; SP elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Mouse
Specificity	This assay has high sensitivity and excellent specificity for detection of Mouse SP. No significant cross-reactivity or interference between Mouse SP and analogues was observed.
Sequence Length	49
Samples	Serum, plasma, cell culture supernates and tissue homogenates
Detection Range	3.12 pg/ml-200 pg/ml
Sensitivity	0.78 pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for SP elisa kit	Introduction: In the field of neuroscience, substance P (SP) is a neuropeptide: an undecapeptide that functions as a neurotransmitter and as a neuromodulator. It belongs to the tachykinin neuropeptide family. Substance P and its closely related neuropeptide neurokinin A (NKA) are produced from a polyprotein precursor after differential splicing of the preprotachykinin A gene. The deduced amino acid sequence of substance P is as follows: Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met. Substance P is released from the terminals of specific sensory nerves, it is found in the brain and spinal cord, and is associated with inflammatory processes and pain. Substance P is an important element in pain perception. The sensory function of substance P is thought to be related to the transmission of pain information into the central nervous system. Substance P coexists with the excitatory neurotransmitter glutamate in primary afferents that respond to painful stimulation. SP has been associated with the regulation of mood disorders, anxiety, stress, reinforcement, neurogenesis, respiratory rhythm, neurotoxicity, nausea/emesis, pain and nociception. Substance P and other sensory neuropeptides can be released from the peripheral terminals of sensory nerve fibers in the skin, muscle and joints. It is proposed that this release is involved in neurogenic inflammation which is a local inflammatory response to certain types of infection or injury. The regulatory function of SP also involves the regulation of its high-affinity receptor, NK-1. Substance P receptor antagonists may have important therapeutic applications in the treatment of a variety of stress-related illnesses, in addition to their potential as analgesics. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to Substance P. Standards or samples are then added to the appropriate microtiter plate wells with a biotin conjugated antibody preparation specific for Substance P and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain Substance P, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of Substance P in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	224037302
UniProt Accession #	D0PTV7
Molecular Weight	5,522 Da
NCBI Official Full Name	substance P, partial
UniProt Protein Name	Substance P
UniProt Entry Name	D0PTV7_CRYPR

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mouse-elisa-kits/substance-p-sp/80142>