



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti-Substance P antibody

Catalog No. 130-10002	Isotype: Rabbit Ig G	Species: Human	Accession No: NM_003182
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Description

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 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 receptor antagonists may have important therapeutic applications in the treatment of a variety of stress-related illnesses, in addition to their potential as analgesics. The deduced amino acid sequence of Substance P is as follows: Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met.

Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:4000(at least detecting 250ng/ml)
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

Immunogen was synthetic peptide derived from human Substance P. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction of serum supernatant was purified followed by Protein A/G affinity chromatography.

Binding Activity

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat Substance P was not tested yet.

Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. ***It final concentration is indicated in shipping vial.***

The antibody is stable for at least years from the data of receipt when stored at -20°C to -70°C . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at -20°C to -70°C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at 4°C . **Please avoid freeze-thaw cycles.**

Storage

Store at -20°C , if not intended for use within a month, keep it at 4°C and minimize freezing and thawing when use.

Related products

1. Rabbit Anti-Human Substance P (CAT# DS-PB-01889)
2. Mouse Anti-Substance P (CAT# MD-14-0532)
3. Rat Anti-Substance P (CAT# DS-MB-02346)

Reference

P. Datar, et al., (2004) Substance P: structure, function, and therapeutics. *Current topics in medicinal chemistry* 4 (1): 75–103.

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