

Datasheet: 8450-0505

Description:	RAT ANTI SUBSTANCE P
Specificity:	SUBSTANCE P
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	NC1/34
Isotype:	IgG2a
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/100 - 1/200
Immunohistology - Paraffin (1)	▪			1/100 - 1/200
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) This product does not require antigen retrieval prior to staining of formalin fixed, paraffin embedded sections.

Species Cross Reactivity

Reacts with: Pig, Pigeon, Bichir, Rabbit, Human, Bovine, Guinea Pig, Calanus sp., Cancer sp., Panilurus sp., Homarus sp., Mudpuppy, Lamprey, Crayfish, Zebrafish, Bullfrog, Cockroach, Sheep, Cowbird, Rat, Spadefoot toad, Chicken, Chinchilla, Camel, Beaver
Based on sequence similarity, is expected to react with: Mammals, Crustacea, Amphibia
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form	Tissue Culture Supernatant - liquid
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Preservative Stabilisers	0.05% Thiomersal
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Immunogen Substance P conjugated to Bovine Serum Albumin.

External Database

Links

UniProt:

[P20366](#) [Related reagents](#)

Entrez Gene:

[6863](#) TAC1 [Related reagents](#)

Synonyms

NKA, NKNA, TAC2

RRID

AB_2200292

Fusion Partners

Spleen cells from immunised Wistar rat were fused with cells of the NS1/1-Ag 4-1 myeloma cell line.

Specificity

Rat anti substance P antibody, clone NC1/34 recognizes the COOH terminal region of substance P, an eleven amino acid polypeptide neurotransmitter derived by proteolytic cleavage of protachykinin-1. Substance P binds to and activates the neurokinin-1 receptor. Substance P is a highly conserved neurotransmitter expressed throughout the animal kingdom. It is highly expressed in the spinal cord dorsal horn and dorsal root ganglia, but not in the ventral horn ([Ribeiro-da-Silva and Hökfelt 2000](#)). It is also expressed in non-neuronal cells including microglia and other immune cells.

Substance P has a role in several physiologic activities such as pain transmission, the vomiting reflex, salivary secretion and smooth muscle contraction ([Hökfelt 2004](#)).

Rat anti substance P antibody, clone NC1/34 demonstrates ~5% reactivity with eliodoin a neurotransmitter identified in the octopus Genus *Eledone*. It does not react with Leu or Met-enkephalin, somatostatin or beta-endorphin in tested applications.

References

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Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10522 available at: 10522: https://www.bio-rad-antibodies.com/uploads/MSDS/10522.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@650 , DyLight@800

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