

Datasheet: 8450-0505

**BATCH NUMBER 155443**

<b>Description:</b>	RAT ANTI SUBSTANCE P
<b>Specificity:</b>	SUBSTANCE P
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	NC1/34
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Product Form</b>	Tissue Culture Supernatant - liquid
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<b>Preservative</b>	0.05% Thiomersal
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## Stabilisers

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**Immunogen** Substance P conjugated to Bovine Serum Albumin.

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## External Database Links

### UniProt:

[P20366](#)    [Related reagents](#)

### Entrez Gene:

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

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**Synonyms** NKA, NKNA, TAC2

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**RRID** AB\_2200292

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

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**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 eldoisin a neurotransmitter identified in the octopus Genus *Eledone*. It does not react with Leu or Met-enkephalin, somatostatin or beta-endorphin in tested applications.

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## References

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<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10522 available at: <a href="https://www.bio-rad-antibodies.com/SDS/8450-0505">https://www.bio-rad-antibodies.com/SDS/8450-0505</a> 10522
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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