

Rat SUBSTANCE P Monoclonal Antibody | anti-TAC1 antibody

RAT ANTI SUBSTANCE P

CATALOG # AAA49521	HOST Rat	APPLICATIONS Immunohistochemistry, Immunofluorescence, Immunohistochemistry
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PRODUCT SYNONYMS

SUBSTANCE P; Monoclonal Antibody; RAT ANTI SUBSTANCE P; NKA; NKNA; TAC2; anti-TAC1 antibody

PRODUCT SPECIFICATIONS

Host	Rat
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	NC1/34
Specificity	SUBSTANCE P
Form/Format	Tissue Culture Supernatant - liquid
Sequence Length	129
Applicable Applications for anti-TAC1 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Species Cross Reactivity	<p>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.</p> <p>Based on sequence similarity, is expected to react with: Mammals, Crustacea, Amphibia N.B. Antibody reactivity and working conditions may vary between species.</p>
Perservative Stabilisers	0.05% Thiomersal
Immunogen	Substance P conjugated to Bovine Serum Albumin
Fusion Partners	Spleen cells from immunised wistar rat were fused with cells of the Ns1/1-Ag 4-1 myeloma cell line.
Preparation and Storage	<p>Store at 4 degree C or at -20 degree 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.</p> <p>Shelf Life: 18 months from date of despatch.</p>



Application Data

Published customer image: Tachykinin-like immunoreactivity in nerve fascicles. Nerve fascicles and parts of nerve fascicles (N) of sections from gastrocnemius (A-C, E, F) and soleus (D) muscle specimens are shown. The sections were processed for demonstration of tachykinin-like immunoreaction (A-E). In (F) the reaction pattern after preabsorption with SP peptide is shown (the region in F corresponds to the region in E). The antibodies applied were sc-14104 (A-C, E) and AAA49521 (D). The specimens were from the control group (A, B, E, F) and from the 6w group, non-exercised side, focal myositis area (C, D). There are immunoreactivities in nerve fascicles in the form of punctuate reactions (arrows A, C-E). These are grouped, as especially seen in (C), but also to some extent in (D). There are no reactions in the nerve fascicle in (B), which is built up of myelinated nerve fibers, and in the control section in (F). MF refers to muscle fibers. Magnification x200 (B, C), x315 (A, D, E, F).From: Song Y, Stål PS, Yu J-G, Forsgren S. Bilateral increase in expression and concentration of tachykinin in a unilateral rabbit muscle overuse model that leads to myositis. BMC Musculoskelet Disord [Internet]. Springer Science + Business Media; 2013;14(1):134.



Application Data

Published customer image: A,B. Tachykinin-like immunoreactivity in cells in inflammatory infiltrate of myositis area. Sections of a specimen from a soleus muscle specimen of the 6w group, non-exercised side. In (A), the section had been immunostained with AAA49521, and in (B), the section was immunostained with AAA49521 after preabsorption with tachykinin (SP) (larger area is covered in B than in A). Immunoreactivity is seen in cells in (A), but no reaction is visible in (B). Arrows point at cells of inflammatory infiltrate. The immunoreactions show partly a granular appearance (A). Magnification x315. c,d. Immunostaining with polyclonal and monoclonal tachykinin antibodies. A part of a focal myositis area of a section of a gastrocnemius muscle specimen from the 1w group, exercised side, double-stained for tachykinin using the sc-14104 (C) and AAA49521 (D) antibodies, shown at low magnification. Note that the cells of an inflammatory infiltrate are immunolabelled in both (C) and (D) (arrows), whereas the wall of a small vessel is only immunostained in (C) (asterisks). Magnification x315.From: Song Y, Stål PS, Yu J-G, Forsgren S. Bilateral increase in expression and concentration of tachykinin in a unilateral rabbit muscle overuse model that leads to myositis. BMC Musculoskelet Disord [Internet]. Springer Science + Business Media; 2013;14(1):134.

ADDITIONAL INFORMATION

Related Product Information for anti-TAC1 antibody	Rat anti substance P antibody, clone NC1/34 recognizes the COOH terminal end of substance P, a short polypeptide neurotransmitter that regulates the excitability of dorsal horn nociceptive neurons. It is known to have a role in several physiologic activities such as pain transmission, the vomiting reflex, salivary secretion and smooth muscle contraction. 5% reactivity is observed with eledoisin. It does not react with Leu or Met-enkephalin, somatostatin or beta-endorphin.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4507341
NCBI GeneID	6863
NCBI Accession #	NP_003173.1
NCBI GenBank Nucleotide #	NM_003182.2
UniProt Accession #	P20366; O60600; O60601; Q00072; Q53GH4; Q549V0; Q549V1; Q549V2; Q6FHM1
Molecular Weight	11,376 Da
NCBI Official Full Name	protachykinin-1 isoform beta
NCBI Official Synonym Full Names	tachykinin, precursor 1
NCBI Official Symbol	TAC1
NCBI Official Synonym Symbols	NK2; NPK; NKNA; TAC2; Hs.2563
NCBI Protein Information	protachykinin-1; PPT; neurokinin 1; neurokinin 2; neurokinin A; neurokinin alpha; neuromedin L; neuropeptide K; neuropeptide gamma; preprotachykinin; substance K; substance P; tachykinin 2; tachykinin, precursor 1 (substance K, substance P, neurokinin 1, neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma)
UniProt Protein Name	Protachykinin-1
UniProt Gene Name	TAC1
UniProt Synonym Gene Names	NKA; NKNA; TAC2; NKA; NPK
UniProt Entry Name	TKN1_HUMAN

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/monoclonal/substance-p-antibody-clone-nc1-34-immunohistochemistry-immunofluorescence-immunohistochemistry-elisa/49521>