

Product datasheet

Anti-Substance P antibody [SP-DE4-21] ab14184

★★★★☆ 15 Abreviews 26 References 4 Images

Overview

Product name	Anti-Substance P antibody [SP-DE4-21]
Description	Mouse monoclonal [SP-DE4-21] to Substance P
Host species	Mouse
Specificity	The antibody reacts specifically with human Substance P. No crossreactivity with related tachykinins (human Neurokinin A, Neurokinin B, and Kassinin).
Tested applications	Suitable for: IHC-P, ICC/IF
Species reactivity	Reacts with: Rat, Guinea pig, Human Predicted to work with: Horse, Chicken, Hamster, Cow, Shark, Common marmoset
Immunogen	Synthetic peptide corresponding to Human Substance P aa 58-68. Sequence: RPKPQQFFGLM Database link: P20366 Run BLAST with Run BLAST with
Positive control	Guinea pig bone marrow. The antibody binds to the substantia gelatinosa.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team</p>

ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituents: PBS, 0.75% Glycine
Purity	Protein G purified
Clonality	Monoclonal
Clone number	SP-DE4-21
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab14184** in the following tested applications.

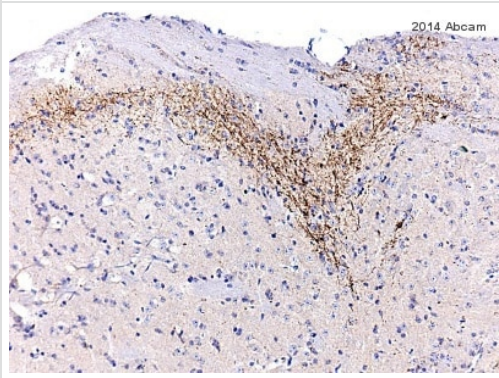
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★☆	1/1000 - 1/2000.
ICC/IF	★★★★★	Use at an assay dependent concentration.

Target

Function	Tachykinins are active peptides which excite neurons, evoke behavioral responses, are potent vasodilators and secretagogues, and contract (directly or indirectly) many smooth muscles.
Sequence similarities	Belongs to the tachykinin family.
Cellular localization	Secreted.

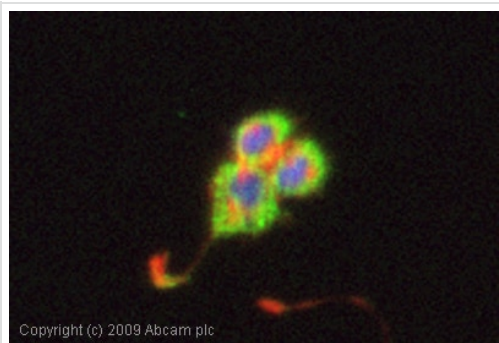
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Substance P antibody [SP-DE4-21] (ab14184)

This image is courtesy of an Abreview submitted by Carl Hobbs

ab14184 staining Substance P in mouse spinal cord tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in citric acid. Samples were incubated with primary antibody (1/500 in TBS/BSA/azide) for 2 hours at 21°C. A biotin-conjugated goat anti-mouse IgG polyclonal (1/200) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Substance P antibody [SP-DE4-21] (ab14184)

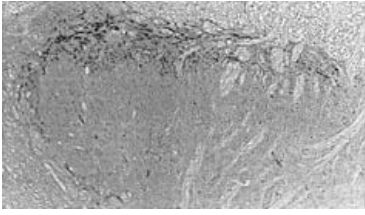
ICC/IF image of ab14184 stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14184, 1ug/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43uM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Substance P antibody [SP-DE4-21] (ab14184)

Image courtesy of an anonymous Abreview.

ab14184 staining Substance P in human pancreas tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed in formaldehyde and an enzymatic antigen retrieval step was performed. Samples were then incubated with ab14184 at a 1/100 dilution for 1 hour. The secondary used was an undiluted HRP conjugated goat anti-mouse polyclonal.



Substance P staining at 1:1000 of the substantia gelatinosa (dorsal horn) of the guinea pig spinal cord using an HRP-conjugated secondary antibody and DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Substance P antibody [SP-DE4-21] (ab14184)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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