abcam

Product datasheet

Anti-Substance Pantibody [SP-DE4-21] ab14184

★★★★ 15 Abreviews 39 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: ELISA, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, 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 Guinea pig bone marrow. The antibody binds to the substantia gelatinosa.

General notes The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

Run BLAST with

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Positive control

Form

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

Protein G purified **Purity**

ClonalityMonoclonalClone numberSP-DE4-21

Isotype IgG1

Applications

The Abpromise guarantee

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 |
|-------------|-------------------------|--|
| ELISA | ★★★★ <u>(1)</u> | Use at an assay dependent concentration. |
| IHC-P | ★★★★ <u>(12)</u> | 1/1000 - 1/2000. |
| ICC/IF | ★★★★★ (2) | Use at an assay dependent concentration. |

Target

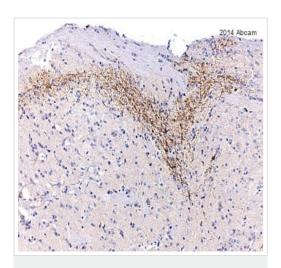
Function Tachykinins are active peptides which excite neurons, evoke behavioral responses, are potent

vasodilators and secretagogues, and contract (directly or indirectly) many smooth muscles.

Sequence similarities Belongs to the tachykinin family.

Cellular localization Secreted.

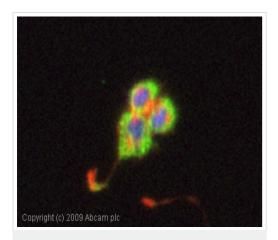
Images



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

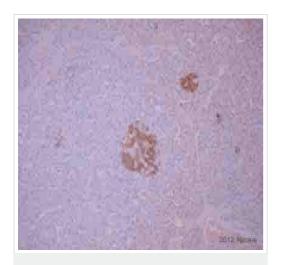
This image is courtesy of an Abreview submitted by Carl Hobbs

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)ÿwas Alexa Fluor© 488 goat anti-mouse lgG (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.

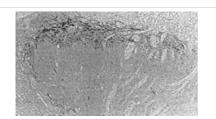


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Substance P antibody [SP-DE4-21] (ab14184)

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.



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

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

 $\textbf{Please note:} \ \ \textbf{All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"}$

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