

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat Substance P.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 266815
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	KLH-coupled mouse Substance P synthetic peptide RPKPQQFFGLM
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

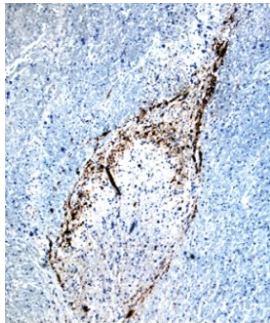
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



**Substance P in Human Spinal Cord.** Substance P was detected in immersion fixed paraffin-embedded sections of human spinal cord using 8 µg/mL Human/Mouse/Rat Substance P Monoclonal Antibody (Catalog # MAB4375) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific labeling was localized to the spinal cord dorsal horn. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Substance P (Neurokinin-1), is member of the tachykinin peptide family. Processing of preprotachykinin isoforms generates Substance P and other tachykinins. Active Substance P is an 11 amino acid peptide, RPKPQQFFGLM, that is identical across all mammalian species. Substance P is mainly secreted from C-type fibers of primary sensory afferent neurons after stimulation through protease-activated receptor 2 (PAR2). Substance P binds primarily to the neurokinin 1 receptor on neurons in the dorsal horn, transmitting pain signals through the central nervous system.