

## Product datasheet

### SUBSTANCE P RAT MONOCLONAL ANTIBODY (NC1/34)

**SKU:** 1021

0.5 mL

#### OVERVIEW

**Clonality:**

Monoclonal

**Host:**

Rat

**Reactivity:**

Human, predicted all mammals, crab, pigeons

**Application:**

IHC, ICC, ELISA

**Target:**

Substance P

**Target background:**

The discovery of substance P (SP) was reported in 1931. After more than 70 years of investigation, SP is perhaps the best understood neuropeptide transmitter. Substance P is an undecapeptide, which by the mid-1980s was recognized to belong to the tachykinin peptide family; it is also member of the neurokinins. It has been proposed that SP, released from primary afferent nerve endings, plays a role in chronic inflammation and pain. Neurotransmitters appear to play a key role in the regulation of emotions and antagonists of their receptors may be novel psychotropic drugs of the future.

**Target alias:**

Substance P, tachykinin, neuropeptide, neurokinin, SP, anti-tachykinin, anti-neuropeptide, anti-neurokinin, anti-SP

**Immunogen:**

Substance P

**Specificity:**

This antibody recognizes the COOH-terminal end of substance P. It does not recognize Leu- or Met enkephalin, somatostatin or beta-endorphin; cross-reactivity with eledoisin: 5%. It recognizes Substance P in post-mortem tissue of the human brain.

**Clone ID:**

NC1/34

**Isotype:**

IgG2a

**Preservative:**

0.05% thimerosal

**Format:**

Lyophilized tissue culture supernatant

**Recommend starting dilution:**

If reconstituted with deionized water in 0.5 mL: IHC and ICC 1:200 - 1:500. Optimal dilution has to be determined by the user.

**Limitations:**

Research Use Only

**References:**

- 1.-Cuello AC - Detection of substance P in the central nervous system by a monoclonal antibody.
- 2.-Cuello AC - Organization of substance P primary sensory neurons: ultrastructural and physiological correlates.
- 3.-Ramien M - Parasympathetic nerve fibers invade the upper dermis following sensory denervation of the rat lower lip skin.
- 4.-Ruocco I - Skin blood vessels are simultaneously innervated by sensory, sympathetic, and parasympathetic fibers.

**Storage:**

Lyophilized antibodies can be kept at 4°C for up to 3 months and should be kept at -20°C for long-term storage (2 years). To avoid freeze-thaw cycles, reconstituted antibodies should be aliquoted before freezing for long-term (1 year) storage (-80°C) or kept at 4°C for short-term usage (2 months). For maximum recovery of product, centrifuge the original vial prior to removing the cap. Further dilutions can be made with the assay buffer. After the maximum long-term storage period (2 years lyophilized or 1 year reconstituted) antibodies should be tested in your assay with a standard sample to verify if you have noticed any decrease in their efficacy.

**Image:**