

## Product datasheet for **AM02226PU-N**

### TAC1 Mouse Monoclonal Antibody [Clone ID: SP-DE4-21]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	SP-DE4-21
Applications:	ELISA, IF, IHC
Recommended Dilution:	<b>ELISA:</b> 1/10,000. <b>Immunohistochemistry on Vibratome Sections:</b> 1/500-1/1,000. <b>Immunohistochemistry on Frozen Sections:</b> 1/300 (Ref.2-4). Specimen fixation <b>not</b> in Methanol.
Reactivity:	Guinea Pig, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic Human Substance P.
Specificity:	The antibody reacts specifically with Substance P. No cross reaction against related Tachykinins (Neurokinin A, Neurokinin B, and Kassinin).
Formulation:	PBS, pH 7.4 State: Purified State: Lyophilized purified IgG fraction from Cell Culture Supernatant
Reconstitution Method:	Restore in aqua bidest to 1 mg/ml.
Concentration:	1.0 mg/ml (after reconstitution)
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	tachykinin precursor 1



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**Database Link:** [Entrez Gene 21333 Mouse](#)[Entrez Gene 24806 Rat](#)[Entrez Gene 6863 Human P20366](#)

**Background:** Substance P (SP) is currently thought to be one of the most important neurotransmitters and neurotransmitters in the brain. It is an undecapeptide belonging to the tachykinin family, which consists of excitatory neuropeptides synthesised in neuronal and glial cells of the human central and peripheral nervous system. Substance P, Neurokinin A, Neuropeptide K, and Neuropeptide gamma are all generated by post-translation cleavage of the precursor Protachykinin-1. Substance P forms the major endogenous ligand for Neurokinin 1 Receptor. The pharmacology of Substance P has been associated with a number of neurological and psychiatric disorders, namely nociception, migraine, asthma, nausea, inflammatory bowel syndrome, urinary incontinence, anxiety and depression. It has also been linked to obesity.

**Synonyms:** Substance-P

**Note:** LocusID 6863 (tachykinin precursor contains: substance K, substance P, neurokinin 1, neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma).

**Protein Families:** Druggable Genome, Secreted Protein

### Product images:

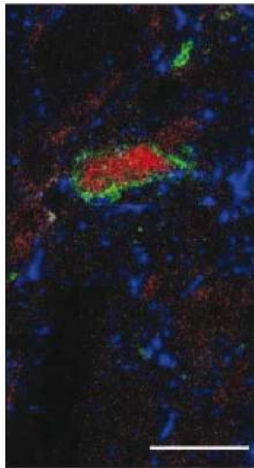


Figure 1. Immunofluorescence of Substance P staining in Vibratome section of Rat spinal cord. The section was incubated with at 1/500 for 48h, followed by an appropriate secondary antibody coupled to Cyanine 5. This antibody stains SP-Positive nerve (blue) in the close vicinity of Neurons expressing Neurokinin 1 receptor (Green) and 5-Alpha Reductase (Red) in the dorsal horn laminal. Scal bar - 20µm. Patte-Mensch C et al. (2005) Proc Natl. Acad. Sci. USA 102 (25):9044-9.