

Neuroserpin, human recombinant protein
Serpin I1, Protease inhibitor 12
Catalog # PBV10811r**Specification****Neuroserpin, human recombinant protein - Product info**

Primary Accession [Q99574](#)
Calculated MW **44.8 kDa** KDa

Neuroserpin, human recombinant protein - Additional Info

Gene ID	5274
Gene Symbol	SERPINI1
Other Names	
Serpin I1, Protease inhibitor 12	
Gene Source	Human
Source	E. Coli
Assay&Purity	SDS-PAGE; ≥96%
Assay2&Purity2	HPLC;
Recombinant	Yes
Sequence	MTGATFPEEA IADLSVNMYN RLRATGEDEN ILFSPLSIAL AMGMMEELGAQ GSTQKEIRHS MGYDSLKNGE EFSFLKEFSN MVTAKESQYV MKIANSLFVQ NGFHVNEEFL QMMKKYFNAA VNHVDFSQNV AVANYINKWV ENNTNNLVKD LVSPRDFDAA TYLALINAVY FKGWWSQFR PENTRTFSFT KDDSEVQIP MMYQQGEFYY GEFSDGSNEA GGIYQVLEIP YEGDEISMML VLSRQEVPLA TLEPLVKAQL VEEWANSVKK QKVEVYLPRF TVEQEIDLKD VLKALGITEI FIKDANLTGL SDNKEIFLSK AIHKSFLEVN EEGSEAAVS GMIAISRMAY LYPQVVDHP FFFLIRNRRT GTILFMGRVM HPETMNTSGH DFEEL

Target/Specificity

Neuroserpin

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 20 mM Sodium Phosphate pH 7.8 and 50 mM NaCl

Neuroserpin, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Neuroserpin, human recombinant protein - Images

Neuroserpin, human recombinant protein - Background

Neuroserpin is an inhibitory serpin that is expressed predominantly in central nervous system. Although the physiological target of neuroserpin is still unclear, cumulative evidence suggest that it plays an important role in controlling proteolytic degradation of extracellular matrix (ECM) during synaptogenesis and the subsequent development of neuronal plasticity. In the adult brain, neuroserpin is secreted from the growth cones of neurons in areas where synaptic changes are associated with learning and memory, i.e. cerebral cortex, hippocampus, and amygdala. The neuroprotective role of neuroserpin has been demonstrated in transgenic mice lacking neuroserpin expression. The deficiency of neuroserpin in these mice was associated with motor neuron disease characterized by axonal degradation. In humans, defects in neuroserpin, caused by point mutations in the neuroserpin gene, underlie a hereditary disorder called the familial encephalopathy with neuroserpin inclusion bodies (FENIB). Recombinant human neuroserpin is a 44.8 kDa non-glycosylated protein containing 395 amino-acid residues.

Neuroserpin, human recombinant protein - References

Schrimpf S.P., et al. Genomics 40:55-62(1997).
Kinter J., et al. Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.