

## SERPINI1

### Recombinant Human Neuroserpin

<b>Catalog No.</b>	CS288A CS288B CS288C	<b>Quantity:</b>	5 µg 25 µg 1 mg
<b>Alternate Names:</b>	PI12, Peptidase inhibitor 12, Serpin I1, Serine (or cysteine) proteinase inhibitor, clade I (neuroserpin), member 1		
<b>Description:</b>	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. 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).		
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.		
<b>Gene ID:</b>	5274		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	Approximately 44.8 kDa, a single non-glycosylated polypeptide chain containing 395 amino acid residues.		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
<b>Purity:</b>	>95% by SDS-PAGE and HPLC analyses.		
<b>Endotoxin Level:</b>	Less than 1 EU/µg of Recombinant Human Neuroserpin as determined by LAL method.		
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> determined by a cell proliferation assay using rat C6 cells is less than 600 ng/ml, corresponding to a specific activity of >1.67×10 <sup>3</sup> IU/mg.		
<b>Amino Acid Sequence:</b>	MTGATFPEEA IADLSVNMYN RLRATGEDEN ILFSPLSIAL AMGMMEELGAQ GSTQKEIRHS MGYDSLKNGE EFSFLKEFSN MVTAKESQYV MKIANSLFVQ NGFHVNEEFL QMMKKYFNAA VNHVDFSQNV AVANYINKWV ENNTNNLVKD LVSPRDFDAA TYLALINAVY FKGNWKSQFR PENTRTFSFT KDDSEVQIP MMYQQGEFYY GEFSDGSNEA GGIYQVLEIP YEGDEISMML VLSRQEVPLA TLEPLVKAQL VEEWANSVKK QKVEVYLPRF TVEQEIDLKD VLKALGITEI FIKDANLTGL SDNKEIFLSK AIHKSFLEVN EEGSEAAAVS GMIAISRMAY LYPQVIVDHP FFFLIRNRRT GTILFMGRVM HPETMNTSGH DFEEL		
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate		



buffered solutions.

**Storage & Stability:**

This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

