

## 32-4822: Recombinant Human Serpin Peptidase Inhibitor, Clade I Member 1

**Alternative Name :** Neuroserpin, Peptidase inhibitor 12, PI-12, Serpin I1, SERPINI1, PI12.

### Description

Source : Escherichia Coli. SERPINI1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 395 amino acids and having a total molecular mass of 44.6kDa. SERPINI1 is purified by proprietary chromatographic techniques. SERPINI1 (Neuroserpin) is an inhibitory serpin which is expressed primarily in the central nervous system. Even though the physiological target of SERPINI1 is still vague, amassed evidence suggest that SERPINI1 has an imperative role in controlling proteolytic degradation of extracellular matrix (ECM) during synaptogenesis and the subsequent development of neuronal plasticity. The neuroprotective role of SERPINI1 has been demonstrated in transgenic mice lacking SERPINI1 expression. The deficiency of SERPINI1 in these mice is linked with motor neuron disease characterized by axonal degradation. In humans, defects in SERPINI1, caused by point mutations in the neuroserpin gene, trigger a hereditary disorder known as the familial encephalopathy with neuroserpin inclusion bodies (FENIB).

### Product Info

<b>Amount :</b>	20 µg
<b>Purification :</b>	Greater than 97.0% as determined by (a) Analysis by HPLC. (b) Analysis by SDS-PAGE.
<b>Content :</b>	The protein was Lyophilized from a 0.2µm filtered concentrated solution in 1xPBS, pH 7.4.
<b>Storage condition :</b>	Lyophilized SERPINI1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SERPINI1 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	MTGATFPEEA IADLSVNMVN RLRATGEDEN ILFSPLSIAL AMGMELGAQ 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 GMIAISRMV LYPQVVDHP FFFLIRNRRT GTILFMGRVM HPETMNTSGH DFEEL.

### Application Note

It is recommended to reconstitute the lyophilized SERPINI1 in sterile 18M-cm H<sub>2</sub>O not less than 100 Å<sup>2</sup> µg/ml, which can then be further diluted to other aqueous solutions. Determined by the dose-dependent stimulation of the proliferation of rat C6 cells using a concentration range of 0.3-0.6 Å<sup>2</sup> ¼g/ml.

