

## SERPINI1 Human

**Description:** 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.

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

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Amino Acid Sequence:** MTGATFPEEA IADLSVNMVN RLRATGEDEN ILFSPLSIAL  
AMGMMLGAQ GSTQKEIRHS MGYDSLKNGE EFSFLKEFSN MVTAKESQYV MKIANSFLVQ  
NGFHVNEEFL QMMKKYFNAA VNHVDFSQNV AVANYINKWV ENNTNNLVKD LVSPRDFDAA  
TYLALINAVY FKGNWKSQFR PENTRTFSFT KDDSEVQIP MMYQQGEFY GEFSDGSNEA  
GGIYQVLEIP YE

**Purity:** Greater than 97.0% as determined by (a) Analysis by HPLC. (b) Analysis by SDS-PAGE.

**Formulation:**

The protein was Lyophilized from a 0.2

**Stability:**

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.

**Usage:**

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**Solubility:**

It is recommended to reconstitute the lyophilized SERPINI1 in sterile 18M-cm H<sub>2</sub>O not less than 100

**Introduction:**

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).

**Biological Activity:**

Determined by the dose-dependent stimulation of the proliferation of rat C6 cells using a concentration range of 0.3-0.6 g/ml.

Catalog #:PRPS-220

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