

## 32-4823: Recombinant Human Serpin Peptidase Inhibitor, Clade I Member 1, His Tag

**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 (a.a 17-410) containing 404 amino acids and including a 10 a.a N-terminal His tag. The total molecular mass is 45.9kDa (calculated). 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

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| <b>Amount :</b>            | 10 µg  |
| <b>Purification :</b>      | Greater than 95.0% as determined by SDS-PAGE.  |
| <b>Content :</b>           | Filtered (0.4µm) and lyophilized from 0.5mg/ml in 0.025M phosphate buffer and 0.035M NaCl, pH 7.4.   |
| <b>Storage condition :</b> | Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.   |
| <b>Amino Acid :</b>        | MKHHHHHHASTGATFPEEI ADLSVNMYNR LRATGEDENI LFSPLSIALA MGMMELGAQG<br>STQKEIRHSM GYDSLKNGEE FSFLKEFSNM VTAKESQYVM KIANSLFVQN GFHVNEEFLLQ<br>MMKKYFNAAV NHVDFSQNVV VANYINKWVE NNTNNLVKDL VSPRDFDAAT YLALINAVYF<br>KGNWKSQFRP ENTRTFSTFK DDESEVQIPM MYQQGEFYFG EFSDGSNEAG GIYQVLEIPY<br>EGDEISMMMLV LSRQEVPLAT LEPLVKAQLV EEWANSVKKQ KVEVYLPRFT VEQEIDLKDV<br>LKALGITEIF IKDANLTGLS DNKEIFLSKA IHKSFLVNE EGSEAAVSG MIAISRMVAVL<br>YPQVIVDHPF FFLIRNRRTG TILFMGRVMH PETMNTSGHD FEEL. |

### Application Note

It is recommended to add 200µl deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. SERPINI1 is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

