



Recombinant Protein Technical Manual  
Recombinant Human SerpinI1/Neuroserpin Protein  
(His Tag)  
RPES3517

### Product Data:

**Product SKU:** RPES3517

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_005016.1

### Protein Information:

**Molecular Mass:** 46 kDa

**AP Molecular Mass:** 50-55 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** neuroserpin;PI12

## Immunogen Information:

**Sequence:** Met 1-Leu 410

## Background:

Neuroserpin, also known as Protease inhibitor 12 and SERPINI1, is a secreted protein which belongs to the serpin family. Neuroserpin is a serine protease inhibitor that inhibits plasminogen activators and plasmin but not thrombin. Serine protease inhibitors of the serpin superfamily are involved in many cellular processes. Neuroserpin was first identified as a protein secreted from the axons of dorsal root ganglion neurons. Neuroserpin is predominantly expressed in the brain, and is expressed in the late stages of neurogenesis during the process of synapse formation. Overexpression of neuroserpin in an anterior pituitary corticotroph cell line results in the extension of neurite-like processes, suggesting that neuroserpin may play a role in cell communication, cell adhesion, and/or cell migration. Neuroserpin may be involved in the formation or reorganization of synaptic connections, as well as synaptic plasticity in the adult nervous system. Neuroserpin may also protect neurons from cell damage by tissue-type plasminogen activator. Defects of neuroserpin are the cause of familial encephalopathy with neuroserpin inclusion bodies (FEN1B).