

# Recombinant Human Neuroserpin (rHuNeuroserpin)

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	402-02
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 44.7 kDa, a single non-glycosylated polypeptide chain containing 394 amino acid residues.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	TGATFP EEAI ADLSVNMYNR LRATGEDENI LFSPLSIALA MGMMELGAQG STQKEIRHSM GYDSLKNGEE FSFLKEFSNM VTAKESQYVM KIANSLFVQN GFHVNEEFLQ MMKKYFNAAV NHVDFSQNVV VANYINKWVE NNTNNLVKDL VSPRDFDAAT YLALINAVYF KGNWKSQFRP ENTRTFSFTK DDESEVQIPM MYQQGEFYYG EFS DGSNEAG GIYQVLEIPY EGDEISMMLV LSRQEVPLAT LEPLVKAQLV EEWANSVKKQ KVEVYLP RFT VEQEIDLKDV LKALGITEIF IKDANLTGLS DNKEIFLSKA IHKSFLEVNE EGSEAAAVSG MIAISRM AVL YPQVIVDHPF FFLIRNRRTG TILFMGRVMH PETMNTSGHD FEEL
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using rat C6 cells is less than 0.5 µg/ml, corresponding to a specific activity of > 2000 IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuNeuroserpin as determined by LAL method.
<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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### *Human Neuroserpin*

Neuroserpin encoded by the SERPINI1 gene in humans is a member of the serine proteinase inhibitor (serpin) family. It reacts preferentially with tissue-type plasminogen activator (tPA). Neuroserpin is expressed mainly in the central nervous system (CNS) in response to neuronal depolarization and plays an important role in the development of synaptic plasticity. Mutations in human neuroserpin result in a form of autosomal dominant inherited dementia which is characterized by the presence of intraneuronal inclusion bodies and is known as Familial Encephalopathy with Neuroserpin Inclusion Bodies.