For Research Use Only

Recombinant Human Neuroserpin protein (rFc Tag)



Catalog Number: Eg2819

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ μ g protein, LAL method

HEK293-derived Human Neuroserpin protein Thr17-Leu410 (Accession# Q99574) with a rabbit IgG Fc tag at the

C-terminus.

GeneID:

5274

Accession: Q99574

Predicted Molecular Mass:

70.7 kDa

SDS-PAGE:

75-90 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as

protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Neuroserpin is a member of the serpin family of serine protease inhibitors predominantly expressed in the nervous system, such as s the cerebral cortex, hippocampus and the spinal cord. Neuroserpin exerts protective effects in neurons against excitotoxicity both in vitro and in vivo. Its proteolytic inhibitory activity is shown to protect neurons against damage caused by plasmin activation. Mice overexpressing neuroserpin exhibited loss of tPA activity in the brain. Overexpression of neuroserpin in primary neurons leads to increased dendritic arborization and altered dendritic spine shape.

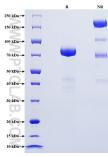
References

- Yang X, Fang Z, et al. (2022) Seizure. 103:137-147.
 Matsuda Y, Miura K, et al. (2016) Cancer Sci. 107(5):619-28.
 Mirshahvaladi S, Chitranshi N, et al. (2024) Proteomes. 12(1):7.
 Ranza E, Garcia-Tarodo S, et al. (2017) Am J Med Genet A. 173(9):2456-2460.

Synonyms

Serpin I1, Neuroserpin, Peptidase inhibitor 12, PI 12, PI12

Selected Validation Data



Purity of Recombinant Human Neuroserpin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.