

TECHNICAL DATA SHEET

Recombinant Human Neuroserpin (Carrier-free)

Catalog Number: 21-7117

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Neuroserpin (Carrier-free)

DESCRIPTION

Neuroserpin, or Serpin I1, is a non-glycosylated inhibitory protein belonging to the serpin superfamily of serine proteinase inhibitors. This brain-associated protein inhibits the tissue-type plasminogen activator (tPA) enzyme. In the central nervous system, tPA is associated with synaptic plasticity and cell death. Neuroserpin expression patterns suggest a role in synaptogenesis. It is secreted by growth cones of neurons and is found predominantly in areas of the brain associated with memory and learning.

MOLECULAR MASS

Recombinant Human Neuroserpin is a 395 amino acid protein with a molecular weight of 44.8 kDa.

AMINO ACID SEQUENCE

MTGATFPEEA IADLSVNMYN RLRATGEDEN ILFSPLSIAL AMGMMELGAQ GSTQKEIRHS MGYDSLKNGE EFSFLKEFSN
 MVTAKESQYV MKIANSLFVQ NGFHVNEEFL QMMKKYFNAA VNHVDFSQNV AVANYINKWV ENNTNNLVKD LVSPRDFDAA
 TYLALINAVY FKGWWSQFR PENTRTFSFT KDDSEVQIP MMYQQGEFYY GEFSDGSNEA GGIYQVLEIP YEGDEISMML
 VLSRQEVPLA TLEPLVKAQL VEEWANSVKK QKVEVYLPFR TVEQEIDLKD VLKALGITEI FIKDANLTGL SDNKEIFLSK AIHKSFLEVN
 EEGSEAAVS GMIAISRMV LYPQVVDHP FFFLIRNRRT GTILFMGRVM HPETMNTSGH DFEEL

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

96 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Rat

BIOACTIVITY

Using a concentration range of 0.3-0.6 μg/ml, activity is determined via a dose-dependent stimulation of rat C6 cell proliferation.

RESEARCH AREAS

Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Schrimpf SP, Bleiker AJ, Brecevic L, Kozlov SV, Berger P, Osterwalder T, Krueger SR, Schinzel A and Sonderegger P. 1997. Genomics. 40(1): 55-62. Galliciotti G and Sonderegger P. 2006. Front Biosci. 11: 33-45. Miranda E and Lomas DA. 2006. Cell Mol Life Sci. 63(6): 709-722. Yepes M and Lawrence DA. 2004. Thromb Haemost. 91(3): 457-464.

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