

Rabbit Anti-Neuroserpin antibody

SL11317R

| Product Name: | Neuroserpin |
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| Chinese Name: | 丝氨酸或半胱氨酸蛋白水解酶抑制蛋白1抗体 |
| Alias: | Neuroserpin; NEUS_HUMAN; Peptidase inhibitor 12; PI-12; PI12; Protease inhibitor 12; Serine or cysteine proteinase inhibitor clade I (neuroserpin) member 1; Serine or cysteine proteinase inhibitor clade I member 1; Serpin I1; Serpin peptidase inhibitor clade I (neuroserpin) member 1; SERPINI1; DKFZp781N13156. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 45kDa |
| Cellular localization: | Secretory protein |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human Neuroserpin:151-250/410 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | <u>PubMed</u> |
| Product Detail: | Neuroserpin is an axonally secreted glycoprotein in the central nervous system (CNS) that belongs to the family of protease inhibitors known as serpins (1,2). Neuroserpin is a serine-protease inhibitor (3) that forms SDS-stable complexes with tissue plasminogen activator (tPA), urokinase and plasmin, but not thrombin (2,4,5). Neuroserpin is |

expressed in the neocortex, the hippocampal formation, the olfactory bulb and the amygdala in the adult CNS, and it is expressed in the cerebellum, the granule cells and a subgroup of Purkinje cells in the developing embryo (2). tPA expression has been linked to "neuronal plasticity", either in the developing embryo CNS (2,4) or in cases of synpatic remodeling or long-term potentiation (6). Overexpression of tPA may promote neuronal cell death (6). Mutations in the gene which codes for neuroserpin are linked to hereditary dementia (7). Intracerebral administration of neuroserpin after stroke decreases stroke volume and diminishes the apoptotic features of the resulting ischemic penumbra (6).

Function:

Serine protease inhibitor that inhibits plasminogen activators and plasmin but not thrombin. May be involved in the formation or reorganization of synaptic connections as well as for synaptic plasticity in the adult nervous system. May protect neurons from cell damage by tissue-type plasminogen activator.

Subcellular Location:

Secreted.

Tissue Specificity:

Predominantly expressed in the brain.

DISEASE:

Defects in SERPINI1 are the cause of familial encephalopathy with neuroserpin inclusion bodies (FEN1B) [MIM:604218]. FEN1B is characterized clinically as an autosomal dominantly inherited dementia, histologically by unique neuronal inclusion bodies and biochemically by polymers of neuroserpin.

Similarity:

Belongs to the serpin family.

SWISS:

099574

Gene ID:

5274

Database links:

Entrez Gene: 5274Human

Entrez Gene: 20713 Mouse

Entrez Gene: 116459Rat

Omim: 602445Human

SwissProt: Q99574Human

SwissProt: O35684Mouse

SwissProt: Q9JLD2Rat

Unigene: 478153Human

Unigene: 41560Mouse

Unigene: 52632Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.