

neuroserpin (H-90): sc-32947

BACKGROUND

Neuroserpin is an axonally secreted glycoprotein in the central nervous system (CNS) that belongs to the family of protease inhibitors known as serpins. Neuroserpin is a serine-protease inhibitor that forms SDS-stable complexes with tissue plasminogen activator (tPA), urokinase and plasmin, but not thrombin. 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. tPA expression has been linked to "neuronal plasticity", either in the developing embryo CNS or in cases of synaptic remodeling or long-term potentiation. Overexpression of tPA may promote neuronal cell death. Mutations in the gene which codes for neuroserpin are linked to hereditary dementia. Intracerebral administration of neuroserpin after stroke decreases stroke volume and diminishes the apoptotic features of the resulting ischemic penumbra.

CHROMOSOMAL LOCATION

Genetic locus: SERPINI1 (human) mapping to 3q26.1; Serpini1 (mouse) mapping to 3 E3.

SOURCE

neuroserpin (H-90) is a rabbit polyclonal antibody raised against amino acids 61-150 mapping within an internal region of neuroserpin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

neuroserpin (H-90) is recommended for detection of neuroserpin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

neuroserpin (H-90) is also recommended for detection of neuroserpin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for neuroserpin siRNA (h): sc-42109, neuroserpin siRNA (m): sc-42110, neuroserpin shRNA Plasmid (h): sc-42109-SH, neuroserpin shRNA Plasmid (m): sc-42110-SH, neuroserpin shRNA (h) Lentiviral Particles: sc-42109-V and neuroserpin shRNA (m) Lentiviral Particles: sc-42110-V.

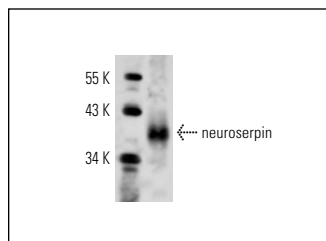
Molecular Weight of neuroserpin: 55 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

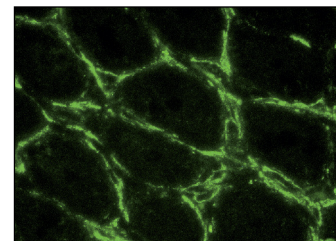
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



neuroserpin (H-90): sc-32947. Western blot analysis of human recombinant neuroserpin.



neuroserpin (H-90): sc-32947. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. VanLandingham, J.W., et al. 2008. Progesterone and its metabolite allopregnanolone differentially regulate hemostatic proteins after traumatic brain injury. *J. Cereb. Blood Flow Metab.* 28: 1786-1794.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **neuroserpin (C-9): sc-48360**, our highly recommended monoclonal alternative to neuroserpin (H-90).