

neuroserpin (C-13): sc-20831

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 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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.

Blocking peptide available for competition studies, sc-20831 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

neuroserpin (C-13) 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 (C-13) is also recommended for detection of neuroserpin in additional species, including equine, canine, bovine, porcine and avian.

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.

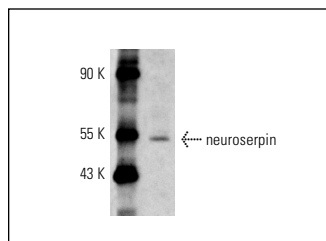
Molecular Weight of neuroserpin: 55 kDa.

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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



neuroserpin (C-13): sc-20831. Western blot analysis of neuroserpin expression in IMR-32 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Takasawa, A., et al. 2008. Mutation-, aging-, and gene dosage-dependent accumulation of neuroserpin (G392E) in endoplasmic reticula and lysosomes of neurons in transgenic mice. *J. Biol. Chem.* 283: 35606-35613.

STORAGE

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

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 (C-13).