**BACKGROUND**

The opsin family of proteins are G protein-coupled receptors that function in a light-dependent manner. Neuropsin is a 354-amino acid extracellular matrix serine protease expressed by neurons and glial cells involved in learning and memory. Neuropsin bears a lysine that forms a Schiff base with a chromophore, a C-terminal tail with sites for serine and threonine phosphorylation and a conserved DRY motif that is important for G protein-binding. Neuropsin has a role in neuronal plasticity, and its expression is upregulated in response to injury to the CNS. Its neuronal plasticity also plays a role in the formation of both the Schaffer-collateral long-term potentiation (LTP) effect and hippocampus-dependent forms of memory. The proteolytic function of neuropsin may also regulate the early phase of LTP. Neuropsin deficiency may be involved in the pathogenesis of multiple sclerosis caused by demyelination and oligodendrogial death.

**REFERENCES**


**SOURCE**

Neuropsin (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of neuropsin 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-48602 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Neuropsin (N-16) is recommended for detection of neuropsin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

**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: 1.2000-1.1000) 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) 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.

**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.