**BACKGROUND**

A novel protein, designated Presenilin 1 (also designated S182) and mapping to the AD3 locus of chromosome 14q24.3, has been described. Mutations in the gene encoding Presenilin 1 have been found in families suffering from early-onset Alzheimer’s disease. A highly related protein, designated Presenilin 2 (also designated STM2), shares 80% amino acid sequence identity with Presenilin 1. Presenilin 1 and Presenilin 2 have similar structures and represent novel members of the seven-pass transmembrane receptor superfamily. Point mutations in the gene encoding Presenilin 2 have been found in Volga German families who suffer from an inherited form of early-onset Alzheimer’s disease. Whether these proteins function as ligand-gated ion channels or G protein-coupled receptors has yet to be resolved. ALG-3, the mouse homolog of human Presenilin 2, has been cloned from the mouse liver cDNA library.

**CHROMOSOMAL LOCATION**

Genetic locus: PSEN1 (human) mapping to 14q24.2; Psen1 (mouse) mapping to 12 D1.

**SOURCE**

Presenilin 1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Presenilin 1 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-1244 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Presenilin 1 (C-20) is recommended for detection of Presenilin 1 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). Presenilin 1 (C-20) is also recommended for detection of Presenilin 1 in additional species, including equine, canine, bovine, porcine and avian. Suitable for use as control antibody for Presenilin 1 siRNA (h): sc-36312, Presenilin 1 siRNA (m): sc-36313, Presenilin 1 shRNA Plasmid (h): sc-36312-SH, Presenilin 1 shRNA Plasmid (m): sc-36313-SH, Presenilin 1 shRNA (h) Lentiviral Particles: sc-36312-V and Presenilin 1 shRNA (m) Lentiviral Particles: sc-36313-V.

Molecular Weight of Presenilin 1 holoprotein: 47 kDa.

Molecular Weight of aggregated Presenilin 1: 50-250 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


Try Presenilin 1 (H-5): sc-365495 or Presenilin 1 (D-10): sc-365450, our highly recommended monoclonal alternatives to Presenilin 1 (C-20).