

COL25A1 (N-14): sc-46869

BACKGROUND

Collagen proteins, products of the COL gene family, are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue such as tendons and cartilage. All collagens contain a triple helix domain and frequently show lateral self-association in order to form complex connective tissues. The Collagen Type XXV precursor produces the proteolytic fragment CLAC (collagenous Alzheimer amyloid plaque component), which deposits in senile plaques associated with amyloid β peptides ($A\beta$) in the brains of patients with Alzheimer's disease. CLAC binds to the fibrillized form of $A\beta$, which disturbs the structure and function of plasma membranes.

REFERENCES

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5. Soderberg, L., Kakuyama, H., Moller, A., Ito, A., Winblad, B., Tjernberg, L.O. and Naslund, J. 2005. Characterization of the Alzheimers disease-associated CLAC protein and identification of an β -Amyloid peptide-binding site. *J. Biol. Chem.* 280: 1007-1015.
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CHROMOSOMAL LOCATION

Genetic locus: Col25a1 (mouse) mapping to 3 H1.

SOURCE

COL25A1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Collagen Type XXV of mouse origin.

STORAGE

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

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46869 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COL25A1 (N-14) is recommended for detection of Collagen Type XXV of mouse and rat 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).

Suitable for use as control antibody for COL25A1 siRNA (m): sc-60430, COL25A1 shRNA Plasmid (m): sc-60430-SH and COL25A1 shRNA (m) Lentiviral Particles: sc-60430-V.

Molecular Weight of COL25A1: 110 kDa.

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) 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.

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.