

# Prealbumin (N-19): sc-8105

## BACKGROUND

Prealbumin, also designated transthyretin, is a major thyroid-hormone binding protein involved in transporting thyroxine from the bloodstream to the brain. Prealbumin is located in the cytoplasm and in the vesicles of developing rat brain cells, and is thought to be transported there from the cerebrospinal fluid via endocytosis. Sequence variants of this protein have been identified in amyloid fibrils from patients with familial amyloidotic polyneuropathy (FAP), the most common form of hereditary systemic amyloidosis. Although the biologically active form of transthyretin is a tetramer, the amyloidogenic intermediate is thought to be a monomeric species. Prealbumin also binds to retinol carrier protein, retinol-binding protein. The gene encoding Prealbumin maps to human chromosome 18q12.1.

## REFERENCES

1. Sparkes, R.S., et al. 1987. Assignment of the Prealbumin (PALB) gene (familial amyloidotic polyneuropathy) to human chromosome region 18q11.2-q12.1. *Hum. Genet.* 75: 151-154.
2. Christmanson, L., et al. 1991. The transthyretin cDNA sequence is normal in transthyretin-derived senile systemic amyloidosis. *FEBS Lett.* 281: 177-180.

## CHROMOSOMAL LOCATION

Genetic locus: TTR (human) mapping to 18q12.1; Ttr (mouse) mapping to 18 A2.

## SOURCE

Prealbumin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Prealbumin 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-8105 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Prealbumin (N-19) is recommended for detection of precursor and mature Prealbumin 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), immunohistochemistry (including paraffin-embedded sections) (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 Prealbumin siRNA (h): sc-39715, Prealbumin siRNA (m): sc-39716, Prealbumin shRNA Plasmid (h): sc-39715-SH, Prealbumin shRNA Plasmid (m): sc-39716-SH, Prealbumin shRNA (h) Lentiviral Particles: sc-39715-V and Prealbumin shRNA (m) Lentiviral Particles: sc-39716-V.

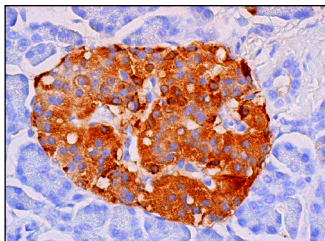
Molecular Weight of Prealbumin: 15 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or H4 cell lysate: sc-2408.

## 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Prealbumin (N-19): sc-8105. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of islets of Langerhans.

## SELECT PRODUCT CITATIONS

1. Chen, L., et al. 2005. Use of a <sup>13</sup>C tracer to investigate lutein as a ligand for plasma transthyretin in humans. *Lipids* 40: 1013-1022.
2. Segaud, F., et al. 2005. Pretreatment of starved rats with ornithine  $\alpha$ -ketoglutarate: effects on hepatic mRNA levels and plasma concentrations of three liver-secreted proteins. *Nutrition* 21: 732-739.
3. Joo, Y., et al. 2009. Chronic immobilization stress induces anxiety- and depression-like behaviors and decreases transthyretin in the mouse cortex. *Neurosci. Lett.* 461: 121-125.

## STORAGE

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

## RESEARCH USE

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


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Try **Prealbumin (E-1): sc-377517** or **Prealbumin (E-4): sc-377178**, our highly recommended monoclonal alternatives to Prealbumin (N-19).