BACKGROUND

The thrombospondin proteins (TSP 1-4) compose a family of glycoproteins that are involved in cell-to-cell and cell-to-matrix signaling. These extracellular, cell-surface proteins form complexes of both homo- and hetero-multimers. Thrombospondins play a role in development, aggregation of platelets, adhesion and migration of cells and progression of cells through the growth cycle. Thrombospondin 1 is released from platelets in response to thrombin stimulation and is a transient component of the extracellular matrix of developing and repairing tissues. Thrombospondin 2 shares a high degree of homology with TSP 1, and is thought to have overlapping but unique functions. Thrombospondin 3 is a developmentally regulated heparin binding protein. Thrombospondin 4 is neuronally expressed and stimulates neurite outgrowth.

CHROMOSOMAL LOCATION

Genetic locus: THBS1 (human) mapping to 15q14; Thbs1 (mouse) mapping to 2 E5.

SOURCE

Thrombospondin 1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Thrombospondin 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-12312 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Thrombospondin 1 (N-20) is recommended for detection of Thrombospondin 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).

Thrombospondin 1 (N-20) is also recommended for detection of Thrombospondin 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Thrombospondin 1 siRNA (h): sc-36665, Thrombospondin 1 siRNA (m): sc-36666, Thrombospondin 1 shRNA Plasmid (h): sc-36665-SH, Thrombospondin 1 shRNA Plasmid (m): sc-36666-SH, Thrombospondin 1 shRNA (h) Lentiviral Particles: sc-36665-V and Thrombospondin 1 shRNA (m) Lentiviral Particles: sc-36666-V.

Molecular Weight of Thrombospondin 1 various forms: 165-198 kDa.

Molecular Weight of Thrombospondin 1 homotrimer: 420 kDa.

Positive Controls: Hs68 cell lysate: sc-2230, CCD-1064Sk cell lysate: sc-2263 or Saos-2 cell lysate: sc-2235.

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


RESEARCH USE

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

Try Thrombospondin 1 (C-8): sc-333504 or Thrombospondin 1 (C-9): sc-333503, our highly recommended monoclonal alternatives to Thrombospondin 1 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Thrombospondin 1 (C-8): sc-333504.