

SCO-spondin (L-13): sc-163332

BACKGROUND

Thrombospondins are 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 heteromultimers. Thrombospondins play a role in development, aggregation of platelets, adhesion and migration of cells and progression of cells through the growth cycle. SCO-spondin, also known as SSPO, is a 5,147 amino acid secreted protein that belongs to the thrombospondin family and plays a role in modulation of neuronal aggregation. Existing as two alternatively spliced isoforms, SCO-spondin participates in the development of the central nervous system and contains one CTCK (C-terminal cystine knot-like) domain, three VWFD domains, two EGF-like domains and three VWFC domains. Additionally, SCO-spondin has one EMI domain, a F5/8 type C domain, 10 LDL-receptor class A domains, 6 TIL (trypsin inhibitory-like) domains and 24 TSP type-1 domains.

REFERENCES

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- Goncalves-Mendes, N., et al. 2003. Mouse SCO-spondin, a gene of the thrombospondin type 1 repeat (TSR) superfamily expressed in the brain. *Gene* 312: 263-270.
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- Goncalves-Mendes, N., et al. 2004. Placental expression of SCO-spondin during mouse and human development. *Gene Expr. Patterns* 4: 309-314.
- Cheng, J., et al. 2005. Transcriptional maps of 10 human chromosomes at 5-nucleotide resolution. *Science* 308: 1149-1154.
- Meinzel, O., et al. 2007. The complex multidomain organization of SCO-spondin protein is highly conserved in mammals. *Brain Res. Rev.* 53: 321-327.

CHROMOSOMAL LOCATION

Genetic locus: SSPO (human) mapping to 7q36.1; Sspo (mouse) mapping to 6 B2.3.

SOURCE

SCO-spondin (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SCO-spondin of human 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 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-163332 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SCO-spondin (L-13) is recommended for detection of SCO-spondin 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).

Suitable for use as control antibody for SCO-spondin siRNA (h): sc-89515, SCO-spondin shRNA Plasmid (h): sc-89515-SH and SCO-spondin shRNA (h) Lentiviral Particles: sc-89515-V.

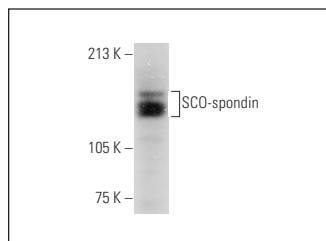
Molecular Weight of SCO-spondin isoforms: 548/139 kDa.

Positive Controls: rat brain extract: sc-2392.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SCO-spondin (L-13): sc-163332. Western blot analysis of SCO-spondin expression in rat brain tissue extract.

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.