

SCO-spondin (C-14): sc-163331

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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- Meinzel, O., et al. 2007. The complex multidomain organization of SCO-spondin protein is highly conserved in mammals. *Brain Res. Rev.* 53: 321-327.
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CHROMOSOMAL LOCATION

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

SOURCE

SCO-spondin (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SCO-spondin of human origin.

RESEARCH USE

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

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-163331 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SCO-spondin (C-14) is recommended for detection of SCO-spondin isoform 1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with isoforms SCO-spondin-2 or SCO-spondin-3.

SCO-spondin (C-14) is also recommended for detection of SCO-spondin isoform 1 in additional species, including equine and bovine.

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.

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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.