

Thrombospondin 1/2 (G-1): sc-133061

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 heteromultimers. 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 Thrombospondin 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.

REFERENCES

1. Mosher, D.F. 1990. Physiology of Thrombospondin. *Annu. Rev. Med.* 41: 85-97.
2. Bornstein, P., et al. 1991. A second, expressed Thrombospondin gene (Thbs2) exists in the mouse genome. *J. Biol. Chem.* 266: 12821-12824.
3. LaBell, T.L., et al. 1992. Thrombospondin II: partial cDNA sequence, chromosome location and expression of a second member of the Thrombospondin gene family in humans. *Genomics* 12: 421-429.
4. O'Rourke, K.M., et al. 1992. Thrombospondin 1 and Thrombospondin 2 are expressed as both homo- and heterotrimers. *J. Biol. Chem.* 267: 24921-24924.
5. Jahav, J. 1993. The functions of Thrombospondin and its involvement in physiology and pathophysiology. *Biochem. Biophys. Acta* 1182: 1-14.

CHROMOSOMAL LOCATION

Genetic locus: THBS1 (human) mapping to 15q14, THBS2 (human) mapping to 6q27; Thbs1 (mouse) mapping to 2 E5, Thbs2 (mouse) mapping to 17 A2.

SOURCE

Thrombospondin 1/2 (G-1) is a mouse monoclonal antibody raised against amino acids 401-700 of Thrombospondin 1/2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Thrombospondin 1/2 (G-1) is available conjugated to agarose (sc-133061 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133061 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133061 PE), fluorescein (sc-133061 FITC), Alexa Fluor® 488 (sc-133061 AF488), Alexa Fluor® 546 (sc-133061 AF546), Alexa Fluor® 594 (sc-133061 AF594) or Alexa Fluor® 647 (sc-133061 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133061 AF680) or Alexa Fluor® 790 (sc-133061 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Thrombospondin 1/2 (G-1) is recommended for detection of Thrombospondin 1 and Thrombospondin 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

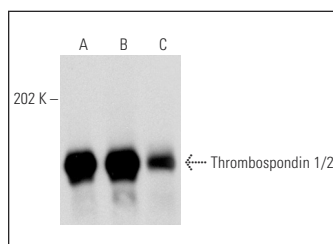
Molecular Weight of Thrombospondin 1/2: 190 kDa.

Positive Controls: Hs68 cell lysate: sc-2230, BJ whole cell lysate: sc-364359 or 3611-RF whole cell lysate: sc-2215.

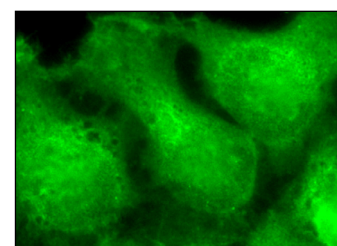
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Thrombospondin 1/2 (G-1): sc-133061. Western blot analysis of Thrombospondin 1 and Thrombospondin 2 expression in Hs68 (A), BJ (B) and 3611-RF (C) whole cell lysates.



Thrombospondin 1/2 (G-1): sc-133061. Immunofluorescence staining of formalin-fixed HeLa cells showing membrane and cytoplasmic localization.

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.

PROTOCOLS

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