

Thrombospondin 1 (3F357): sc-73158

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.

CHROMOSOMAL LOCATION

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

SOURCE

Thrombospondin 1 (3F357) is a mouse monoclonal antibody raised against reduced and alkylated Thrombospondin 1 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 (3F357) is available conjugated to Alexa Fluor® 647 (sc-73158 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

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APPLICATIONS

Thrombospondin 1 (3F357) is recommended for detection of reduced and non-reduced Thrombospondin 1 of mouse, rat, human, equine, bovine, porcine and canine origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

Suitable for use as control antibody for Thrombospondin 1 siRNA (h): sc-36665, Thrombospondin 1 siRNA (m): sc-36666, Thrombospondin 1 siRNA (r): sc-270413, Thrombospondin 1 shRNA Plasmid (h): sc-36665-SH, Thrombospondin 1 shRNA Plasmid (m): sc-36666-SH, Thrombospondin 1 shRNA Plasmid (r): sc-270413-SH, Thrombospondin 1 shRNA (h) Lentiviral Particles: sc-36665-V, Thrombospondin 1 shRNA (m) Lentiviral Particles: sc-36666-V and Thrombospondin 1 shRNA (r) Lentiviral Particles: sc-270413-V.

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

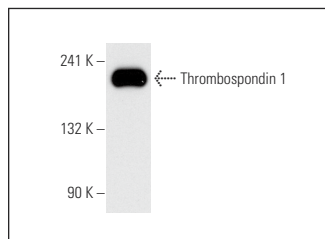
Molecular Weight of Thrombospondin 1 homotrimer: 420 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, Hs68 cell lysate: sc-2230 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



Thrombospondin 1 (3F357): sc-73158. Western blot analysis of Thrombospondin 1 expression in CCD-1064Sk whole cell lysate.

SELECT PRODUCT CITATIONS

- Jiang, H., et al. 2010. Low-dose metronomic paclitaxel chemotherapy suppresses breast tumors and metastases in mice. *Cancer Invest.* 28: 74-84.
- Rocchiccioli, S., et al. 2013. Secreted proteins from carotid endarterectomy: an untargeted approach to disclose molecular clues of plaque progression. *J. Transl. Med.* 11: 260.
- Heo, K.S., et al. 2014. ERK5 activation in macrophages promotes efferocytosis and inhibits atherosclerosis. *Circulation* 130: 180-191.
- Tao, W.Y., et al. 2015. Decrease of let-7f in low-dose metronomic paclitaxel chemotherapy contributed to upregulation of Thrombospondin-1 in breast cancer. *Int. J. Biol. Sci.* 11: 48-58.
- Giovannini, C., et al. 2016. Molecular and proteomic insight into Notch1 characterization in hepatocellular carcinoma. *Oncotarget* 7: 39609-39626.
- Arslan, Y.E., et al. 2018. *Trans*-differentiation of human adipose-derived mesenchymal stem cells into cardiomyocyte-like cells on decellularized bovine myocardial extracellular matrix-based films. *J. Mater. Sci. Mater. Med.* 29: 127.
- Duan, C.Y., et al. 2019. Limbal niche cells can reduce the angiogenic potential of cultivated oral mucosal epithelial cells. *Cell. Mol. Biol. Lett.* 24: 3.
- Hermida-Nogueira, L., et al. 2020. Deciphering the secretome of leukocyte-platelet rich fibrin: towards a better understanding of its wound healing properties. *Sci. Rep.* 10: 14571.

RESEARCH USE

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



See **Thrombospondin 1 (C-8): sc-393504** for Thrombospondin 1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.