

Human Thrombospondin-1

Human Thrombospondin-1 recombinant

Synonyms: Thrombospondin-1, THBS1, TSP, TSP1, THBS, THBS-1.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
2 µg	4070.952.002		
10 µg	4070.952.010		
100 µg	4070.952.100		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant Human Thrombospondin-1 (THBS1, TSP1) produced in insect cells is a 140kDa protein glycosylated with N-linked sugars and is reactive with A4.1 anti-TSP MAB. It is a member of the Thrombospondin family and is encoded by the gene THBS1 which is a subunit of a disulfide-linked homotrimeric protein. Thrombospondin-1 is an adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. Thrombospondin-1 can bind to fibrinogen, fibronectin, laminin, type V collagen and integrins alpha-V/beta-1. Thrombospondin-1 has been shown to play roles in platelet aggregation, angiogenesis, and tumorigenesis and has been shown to be a natural inhibitor of neovascularization and tumorigenesis in healthy tissue. Thrombospondin-1 interacts with no less than 12 cell adhesion receptors, including CD36, αV integrins, β1 integrins, syndecan, and integrin-associated protein (IAP or CD47). Additionally, it interacts with various proteases involved in angiogenesis, including plasminogen, urokinase, matrix metalloproteinase, thrombin, cathepsin, and elastase. Positive and negative modulation of endothelial cell adhesion, motility, and growth are attributed to Thrombospondin-1. Recently, Thrombospondin-1 was found to bind to the reelin receptors, ApoER2 and VLDLR, thereby affecting neuronal migration in the rostral migratory stream.

- **Source** Insect cells
- **Purity** ≥ 90 % (SDS-PAGE)
- **Endotoxin level** ≤ 0.1ng/µg (≤ 1EU/µg)
- **Stabilizer** None
- **Buffer** Sodium phosphate (20mM; pH 6.0) NaCl (300mM)*
- **Physical state** Sterile filtered clear solution (concentration is given on the Lot specific datasheet)

Stability

Recombinant Human Thrombospondin-1 should be stored between 2°C to 8°C. Do not freeze! To prepare aliquots we recommend to further dilute into a buffer containing a carrier protein (e.g. 0.1% HSA ultra pure 2835.958.188) and store in working aliquots at the highest possible and practical concentration.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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