

Synonym

Thrombospondin-2,THBS2,TSP2

Source

Human Thrombospondin-2, His Tag(TH2-H52H5) is expressed from human 293 cells (HEK293). It contains AA Gly 19 - Ile 1172 (Accession # <u>P35442-1</u>). Predicted N-terminus: Gly 19

Molecular Characterization

Thrombospondin-2(Gly 19 - Ile 1172) P35442-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 129.7 kDa. The protein migrates as 180-200 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

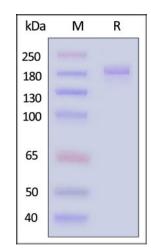
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Thrombospondin-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

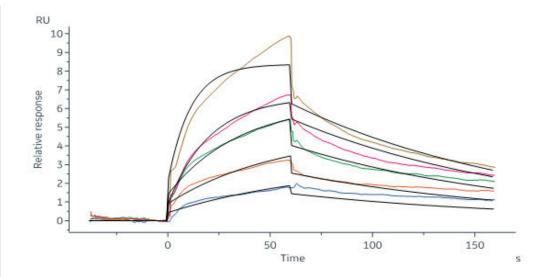
Bioactivity-SPR



Human Thrombospondin-2 Protein, His Tag

Catalog # TH2-H52H5





Human CD36, His Tag (Cat. No. CD6-H5221) immobilized on CM5 Chip can bind Human Thrombospondin-2, His Tag (Cat. No. TH2-H52H5) with an affinity constant of 21 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Thrombospondin-2 is also known as THBS2, TSP2, TSP-2. Thrombospondin-2 (TSP2) is an anti-angiogenic matricellular protein that inhibits tumor growth and angiogenesis. Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. Ligand for CD36 mediating antiangiogenic properties. 2 SNPs in the intron region of THBS2 gene (rs6422747 and rs6422748) were associated with susceptibility of IDD. However, they were not related with severity of IDD, including the total number of degenerative disc and level of IDD. Thrombospondin 2, an important regulator of synaptogenesis in central nervous system development, was distributed in retinal macroglia cells, and its receptor $\alpha 2\delta$ -1 was in retinal neurons. activated macroglia cells may participate in alterations of presynaptic proteins of retinal neurons following elevated hydrostatic pressure, and macroglia-derived thrombospondin 2 may modulate these changes via binding to its neuronal receptor $\alpha 2\delta$ -1.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

