



Recombinant Human THBS1 (C-10His)

Catalog #	EPT088
Expression Host	Human Cells
DESCRIPTION	Recombinant Human Thrombospondin-1 is produced by our Mammalian expression system and the target gene encoding Asn19-Pro1170 is expressed with a 10His tag at the C-terminus.
Accession	P07996
Synonyms	Thrombospondin-1; THBS1; TSP; TSP1
Mol Mass	129.2 KDa
AP Mol Mass	130&170 KDa, reducing conditions
Purity	Greater than 85% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
RECONSTITUTION	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.





It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

Thrombospondin-1 (TSP-1) is a 150-180kDa calcium-sensitive protein that is secreted as a disulfide-linked homotrimer. TSP-1 regulates a wide range of cellular functions including their interactions with other cells and with the extracellular matrix (ECM). TSP-1 contains an N-terminal Laminin G-like globular domain, an extended central region with one vWFC domain, 3 TSP type 1 domains, 2 EGF-like





domains, and 8 TSP type3 domains, and a globular TSP C-terminal domain. Distinct regions of TSP-1 have been associated with binding to particular ECM or cellular molecules. TSP-1 counteracts the angiogenic, hypotensive, and antithrombotic effects of nitric oxide (NO). It binds and neutralizes VEGF, blocks VEGF R2 signaling on vascular endothelial cells(EC), and destabilizes adhesive contacts between EC. TSP-1 also plays an important role in wound repair and tissue fibrosis by binding latent TGF-beta and inducing release of the active cytokine from the latency associated peptide (LAP).

SDS-PAGE

