

Product datasheet for TP727781

OriGene Technologies, Inc.

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Thrombospondin 1 (THBS1) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human Thrombospondin-1/THBS1 (C-10His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Asn19-Pro1170

Tag: C-His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

Note: 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.

Stability: 12 months from date of despatch

Locus ID: 7057 **UniProt ID:** P07996

Summary: 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 1domains, 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).