

Datasheet for ABIN7566369

**Thrombospondin 1 Protein (THBS1) (AA 19-1170) (Fc Tag)**[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	Thrombospondin 1 (THBS1)
Protein Characteristics:	AA 19-1170
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Thrombospondin 1 protein is labelled with Fc Tag.

## Product Details

Purpose:	Thrombospondin-1 (human):Fc (human) (rec.)
Cross-Reactivity:	Human
Characteristics:	The extracellular domain of human thrombospondin-1 (aa 19-1170) is fused to the N-terminus of the Fc region of human IgG1.
Purity:	>98 % (SDS-PAGE)
Sterility:	Sterile filtered
Endotoxin Level:	<0.06EU/µg purified protein (LAL test, Lonza).

## Target Details

Target:	Thrombospondin 1 (THBS1)
Alternative Name:	Thrombospondin-1 ( <a href="#">THBS1 Products</a> )

## Target Details

Background:	<p><b>TSP1</b></p> <p>Thrombospondin-1 (TSP1) is a 150-180 kDa calcium-sensitive protein that is secreted as a disulfide-linked homotrimer. Within the thrombospondin family, TSP-2 is also homotrimeric, while TSP-3, -4, and -5/COMP are homopentameric. 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 type-3 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 anti-thrombotic effects of nitric oxide (NO). It binds and neutralizes VEGF, blocks VEGFR-2 signaling on vascular endothelial cells (EC) and destabilizes adhesive contacts between EC. TSP-1's actions on vascular smooth muscle cells support arterial tone and blood pressure in the presence of vasodilatory stimulation. It is released from activated platelets and enhances platelet aggregation and adhesion. 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). TSP-1 dampens adaptive immune responses by inducing the differentiation of regulatory T cells and inhibiting TCR signaling. In the nervous system, it promotes excitatory synapse formation and supports the integration of neural progenitor cells into the olfactory bulb. In addition, TSP-1 is released by apoptotic cells and promotes macrophage-mediated debris clearance.</p>
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NCBI Accession: [NP\\_003237](#)

Pathways: [Autophagy](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Lyophilized from 0.2µm-filtered solution in PBS.

Handling Advice: Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution.

Storage: 4 °C, -20 °C

Storage Comment: Short Term Storage: +4°C  
Long Term Storage: -20°C

Use & Stability: Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.