

**Thrombospondin 1 Rabbit mAb**  
**Catalog # AP76739****Specification****Thrombospondin 1 Rabbit mAb - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P07996</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	129383

**Thrombospondin 1 Rabbit mAb - Additional Information****Gene ID** 7057**Other Names**

THBS1

**Dilution**

WB~~1/500-1/1000

IHC~~1/50-1/100

**Format**

Liquid

**Thrombospondin 1 Rabbit mAb - Protein Information****Name** THBS1 ([HGNC:11785](#))**Synonyms** TSP, TSP1**Function**

Adhesive glycoprotein that mediates cell-to-cell and cell-to- matrix interactions (PubMed:<a href="http://www.uniprot.org/citations/15014436" target="\_blank">15014436</a>, PubMed:<a href="http://www.uniprot.org/citations/18285447" target="\_blank">18285447</a>, PubMed:<a href="http://www.uniprot.org/citations/2430973" target="\_blank">2430973</a>, PubMed:<a href="http://www.uniprot.org/citations/6489349" target="\_blank">6489349</a>). Multifunctional, involved in inflammation, angiogenesis, wound healing, reactive oxygen species (ROS) signaling, nitrous oxide (NO) signaling, apoptosis, senescence, aging, cellular self-renewal, stemness, and cardiovascular and metabolic homeostasis (PubMed:<a href="http://www.uniprot.org/citations/10613822" target="\_blank">10613822</a>, PubMed:<a href="http://www.uniprot.org/citations/11134179" target="\_blank">11134179</a>, PubMed:<a href="http://www.uniprot.org/citations/1371676" target="\_blank">1371676</a>, PubMed:<a href="http://www.uniprot.org/citations/14568985" target="\_blank">14568985</a>, PubMed:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>, PubMed:<a href="http://www.uniprot.org/citations/29042481" target="\_blank">29042481</a>, PubMed:<a href="http://www.uniprot.org/citations/32679764" target="\_blank">32679764</a>). Negatively

modulates dendritic cell activation and cytokine release, as part of an autocrine feedback loop, contributing to the resolution of inflammation and immune homeostasis (PubMed:<a href="http://www.uniprot.org/citations/14568985" target="\_blank">14568985</a>). Ligand for receptor CD47 (PubMed:<a href="http://www.uniprot.org/citations/19004835" target="\_blank">19004835</a>, PubMed:<a href="http://www.uniprot.org/citations/8550562" target="\_blank">8550562</a>). Modulates nitrous oxide (NO) signaling via CD47, hence playing a role as a pressor agent, supporting blood pressure (By similarity). Plays a role in endothelial cell senescence, acting via CD47, by increasing the abundance and activation of NADPH oxidase NOX1, and so generating excess ROS (PubMed:<a href="http://www.uniprot.org/citations/29042481" target="\_blank">29042481</a>). Inhibits stem cell self-renewal, acting via CD47 signaling, probably by regulation of the stem cell transcription factors POU5F1/OCT4, SOX2, MYC/c-Myc and KLF4 (By similarity). Negatively modulates wound healing, acting via CD47 (By similarity). Ligand for receptor CD36 (PubMed:<a href="http://www.uniprot.org/citations/10613822" target="\_blank">10613822</a>, PubMed:<a href="http://www.uniprot.org/citations/11134179" target="\_blank">11134179</a>, PubMed:<a href="http://www.uniprot.org/citations/1371676" target="\_blank">1371676</a>). Involved in inducing apoptosis in podocytes in response to elevated free fatty acids, acting via CD36 (By similarity). Plays a role in suppressing angiogenesis, acting, depending on context, via CD36 or CD47 (PubMed:<a href="http://www.uniprot.org/citations/10613822" target="\_blank">10613822</a>, PubMed:<a href="http://www.uniprot.org/citations/11134179" target="\_blank">11134179</a>, PubMed:<a href="http://www.uniprot.org/citations/1371676" target="\_blank">1371676</a>, PubMed:<a href="http://www.uniprot.org/citations/32679764" target="\_blank">32679764</a>). Promotes cellular senescence in a TP53-CDKN1A-RB1 signaling-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/29042481" target="\_blank">29042481</a>). Ligand for immunoglobulin-like cell surface receptor SIRPA (PubMed:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>). Involved in ROS signaling in non-phagocytic cells, stimulating NADPH oxidase-derived ROS production, acting via interaction with SIRPA (PubMed:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>). Plays a role in metabolic dysfunction in diet-induced obesity, perhaps acting by exacerbating adipose inflammatory activity; its effects may be mediated, at least in part, through enhanced adipocyte proliferation (By similarity). Plays a role in ER stress response, via its interaction with the activating transcription factor 6 alpha (ATF6) which produces adaptive ER stress response factors (By similarity). May be involved in age-related conditions, including metabolic dysregulation, during normal aging (PubMed:<a href="http://www.uniprot.org/citations/29042481" target="\_blank">29042481</a>, PubMed:<a href="http://www.uniprot.org/citations/32679764" target="\_blank">32679764</a>).

### Cellular Location

Secreted. Cell surface. Secreted, extracellular space, extracellular matrix. Endoplasmic reticulum {ECO:0000250|UniProtKB:P35441}. Sarcoplasmic reticulum {ECO:0000250|UniProtKB:P35441}. Note=Secreted by thrombin-activated platelets and binds to the cell surface in the presence of extracellular Ca(2+) (PubMed:101549, PubMed:6777381). Incorporated into the extracellular matrix (ECM) of fibroblasts (PubMed:6341993). The C-terminal region in trimeric form is required for retention in the ECM (PubMed:18285447). Also detected in the endoplasmic reticulum and sarcoplasmic reticulum where it plays a role in the ER stress response (By similarity). {ECO:0000250|UniProtKB:P35441, ECO:0000269|PubMed:6341993, ECO:0000269|PubMed:6777381}

### Tissue Location

Expressed by platelets (at protein level) (PubMed:101549). Expressed by monocyte-derived immature and mature dendritic cells (at protein level) (PubMed:14568985)

## Thrombospondin 1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Thrombospondin 1 Rabbit mAb - Images

