

**THBS1 Antibody (C-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22285b**

**Specification**

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**THBS1 Antibody (C-Term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P07996</a>
Other Accession	<a href="#">Q28178</a>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	129383

**THBS1 Antibody (C-Term) - Additional Information**

**Gene ID** 7057

**Other Names**

Thrombospondin-1, THBS1, TSP, TSP1

**Target/Specificity**

This THBS1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 820-854 amino acids from human THBS1.

**Dilution**

WB~~1:2000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

THBS1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**THBS1 Antibody (C-Term) - Protein Information**

**Name** THBS1 ([HGNC:11785](#))

**Synonyms** TSP, TSP1

**Function** Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions (PubMed:[15014436](#), PubMed:[18285447](#), PubMed:[2430973](#), PubMed:[6489349](#)). 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:[10613822](#), PubMed:[11134179](#), PubMed:[1371676](#), PubMed:[14568985](#), PubMed:[24511121](#), PubMed:[29042481](#), PubMed:[32679764](#)). 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:[14568985](#)). Ligand for receptor CD47 (PubMed:[19004835](#), PubMed:[8550562](#)). 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:[29042481](#)). 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:[10613822](#), PubMed:[11134179](#), PubMed:[1371676](#)). 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:[10613822](#), PubMed:[11134179](#), PubMed:[1371676](#), PubMed:[32679764](#)). Promotes cellular senescence in a TP53-CDKN1A-RB1 signaling-dependent manner (PubMed:[29042481](#)). Ligand for immunoglobulin-like cell surface receptor SIRPA (PubMed:[24511121](#)). Involved in ROS signaling in non-phagocytic cells, stimulating NADPH oxidase-derived ROS production, acting via interaction with SIRPA (PubMed:[24511121](#)). 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:[29042481](#), PubMed:[32679764](#)).

#### 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)

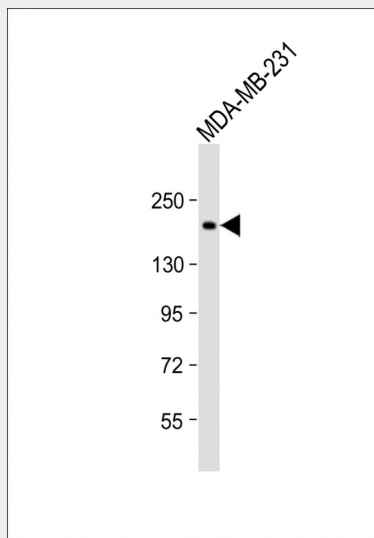
#### THBS1 Antibody (C-Term) - Protocols

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](#)

## THBS1 Antibody (C-Term) - Images



Anti-THBS1 Antibody (C-Term) at 1:2000 dilution + MDA-MB-231 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 129 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

## THBS1 Antibody (C-Term) - Background

Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. Binds heparin. May play a role in dentinogenesis and/or maintenance of dentin and dental pulp (By similarity). Ligand for CD36 mediating antiangiogenic properties. 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).

## THBS1 Antibody (C-Term) - References

- Lawler J., et al. *J. Cell Biol.* 103:1635-1648(1986).  
Hennessy S.W., et al. *J. Cell Biol.* 108:729-736(1989).  
Ota T., et al. *Nat. Genet.* 36:40-45(2004).  
Totoki Y., et al. Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.  
Zody M.C., et al. *Nature* 440:671-675(2006).