

**Anti-Thrombin Receptor Antibody**  
**Catalog # ABO12769****Specification**

---

**Anti-Thrombin Receptor Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P25116</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Proteinase-activated receptor 1(F2R) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Thrombin Receptor Antibody - Additional Information**

**Gene ID** 2149

**Other Names**

Proteinase-activated receptor 1, PAR-1, Coagulation factor II receptor, Thrombin receptor, F2R, CF2R, PAR1, TR

**Calculated MW**

47441 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cell membrane; Multi-pass membrane protein.

**Tissue Specificity**

Platelets and vascular endothelial cells.

**Protein Name**

Proteinase-activated receptor 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Thrombin Receptor (46-82aa RNPNDKYEPFWEDEEKNESGLTEYRLVLSINKSSPLQK).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Anti-Thrombin Receptor Antibody - Protein Information**

**Name** F2R ([HGNC:3537](#))

**Synonyms** CF2R, PAR1, TR

**Function**

High affinity receptor that binds the activated thrombin, leading to calcium release from intracellular stores (PubMed:<a href="http://www.uniprot.org/citations/1672265" target="\_blank">1672265</a>, PubMed:<a href="http://www.uniprot.org/citations/8136362" target="\_blank">8136362</a>). The thrombin-activated receptor signaling pathway is mediated through PTX-insensitive G proteins, activation of phospholipase C resulting in the production of 1D-myo-inositol 1,4,5- trisphosphate (InsP3) which binds to InsP3 receptors causing calcium release from the stores (By similarity). In astrocytes, the calcium released into the cytosol allows the Ca(2+)-dependent release of L- glutamate into the synaptic cleft through BEST1, that targets the neuronal postsynaptic GRIN2A/NMDAR receptor resulting in the synaptic plasticity regulation (By similarity). May play a role in platelets activation and in vascular development (PubMed:<a href="http://www.uniprot.org/citations/10079109" target="\_blank">10079109</a>). Mediates up-regulation of pro-inflammatory cytokines, such as MCP-1/CCL2 and IL6, triggered by coagulation factor Xa (F10) in cardiac fibroblasts and umbilical vein endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/30568593" target="\_blank">30568593</a>, PubMed:<a href="http://www.uniprot.org/citations/34831181" target="\_blank">34831181</a>).

**Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P26824}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P26824}

**Tissue Location**

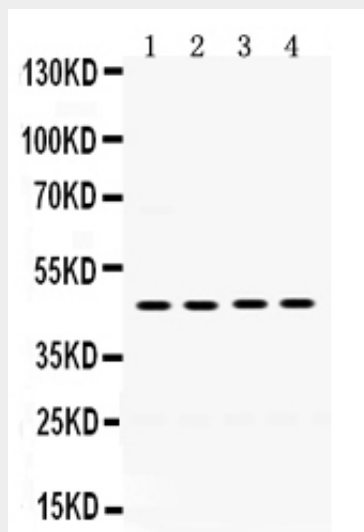
Platelets and vascular endothelial cells.

**Anti-Thrombin Receptor Antibody - Protocols**

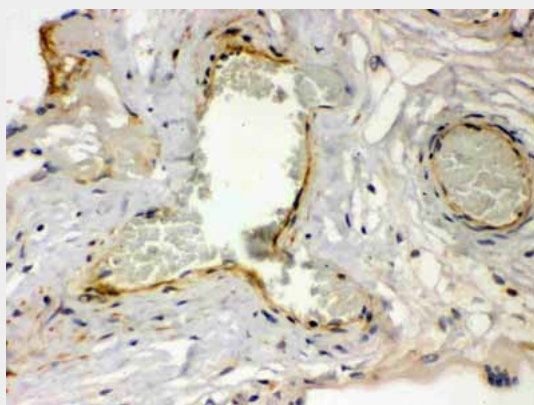
Provided below are standard protocols that you may find useful for product applications.

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

## Anti-Thrombin Receptor Antibody - Images



Anti- Thrombin Receptor antibody, ABO12769, Western blotting All lanes: Anti Thrombin Receptor (ABO12769) at 0.5ug/ml Lane 1: MCF-7 Whole Cell Lysate at 40ug Lane 2: HELA Whole Cell Lysate at 40ug Lane 3: 22RV1 Whole Cell Lysate at 40ug Lane 4: SW620 Whole Cell Lysate at 40ug Predicted bind size: 47KD Observed bind size: 47KD



Anti- Thrombin Receptor antibody, ABO12769, IHC(P) IHC(P): Human Placenta Tissue

## Anti-Thrombin Receptor Antibody - Background

Proteinase-activated receptor 1 (PAR1), also known as the coagulation factor II (thrombin) receptor, is a protein that in humans is encoded by the F2R gene. By fluorescence in situ hybridization, this gene is mapped to 5q13, confirming its presence as a single locus in the human genome. PAR1 is a G protein-coupled receptor involved in the regulation of thrombotic response. Proteolytic cleavage leads to the activation of the receptor. The expression of PAR1 is both required and sufficient to promote growth and invasion of breast carcinoma cells in a xenograft mouse model.