

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

Anti-Thrombin Receptor Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P25116
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

Western blot, 0.1-0.5 µg/ml, Human

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 Na₂HPO₄, 0.05mg Na₃N.

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:1672265, PubMed:8136362). 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:10079109). 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:30568593, PubMed:34831181).

Cellular Location

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

Tissue Location

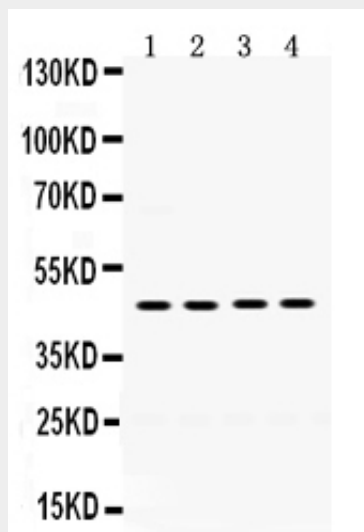
Platelets and vascular endothelial cells.

Anti-Thrombin Receptor Antibody - Protocols

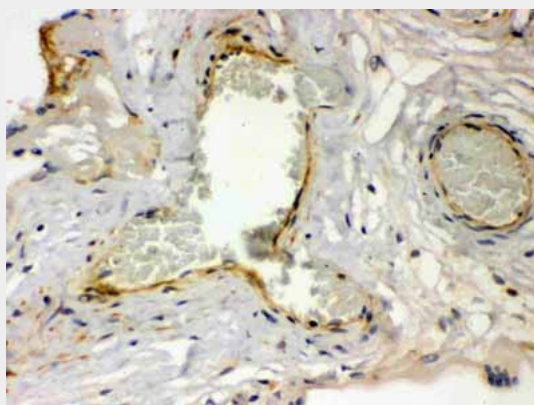
Provided below are standard protocols that you may find useful for product applications.

- [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.