

Anti-Thrombin Receptor Antibody

Catalog # ABO12769

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Tissue Specificity	Platelets and vascular endothelial cells.
Source	Eukaryota
Protein Name	Proteinase-activated receptor 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Thrombin Receptor (46-82aa RNPNDKYEPFWEDEEKNESGLTEYRLVSINKSSPLQK).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage At -20 °C for one year. After reconstitution, 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.

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](#)).

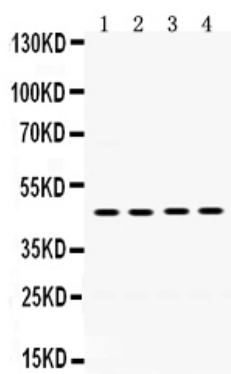
Cellular Location Cell membrane {ECO:0000250|UniProtKB:P26824}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P26824}

Tissue Location Platelets and vascular endothelial cells.

Background

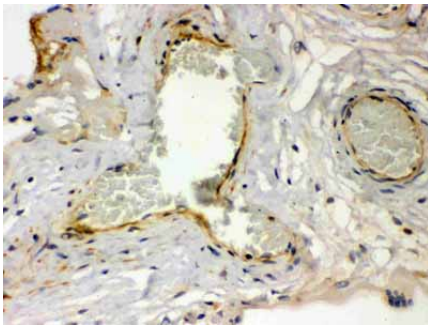
Proteinase-activated receptor 1 (PAR1), also known as the coagulation factor II (thrombin) receptor, is a protein that in humans is encoded by the F2R gene. By fluorescence in situ hybridization, this gene is mapped to 5q13, confirming its presence as a single locus in the human genome. PAR1 is a G protein-coupled 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.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.