

# Thrombin Receptor Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50051

## **Product Information**

Application	WB
Primary Accession	<u>P25116</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	47441

#### **Additional Information**

Gene ID	2149
Other Names	Proteinase-activated receptor 1, PAR-1, Coagulation factor II receptor, Thrombin receptor, F2R, CF2R, PAR1, TR
Dilution	WB~~1:500- 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

### **Protein Information**

Name	F2R ( <u>HGNC:3537</u> )
Synonyms	CF2R, PAR1, TR
Function	High affinity receptor that binds the activated thrombin, leading to calcium release from intracellular stores (PubMed: <u>1672265</u> , PubMed: <u>8136362</u> ). 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: <u>10079109</u> ). 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: <u>30568593</u> , PubMed: <u>34831181</u> ).

Cellular Location	Cell membrane {ECO:0000250 UniProtKB:P26824}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P26824}
Tissue Location	Platelets and vascular endothelial cells.

### Background

High affinity receptor for activated thrombin coupled to G proteins that stimulate phosphoinositide hydrolysis. May play a role in platelets activation and in vascular development.

#### References

Vu T.-K.H.,et al.Cell 64:1057-1068(1991). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Shapiro M.J.,et al.J. Biol. Chem. 271:32874-32880(1996). Kahn M.L.,et al.J. Clin. Invest. 103:879-887(1999). Zania P.,et al.J. Pharmacol. Exp. Ther. 328:378-389(2009).

#### Images



Western blot analysis of lysates from K562 cell line ,using Thrombin Receptor Antibody(C0344). C0344 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug.

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