

### **Thrombin Receptor Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50051

# **Specification**

# **Thrombin Receptor Antibody - Product Information**

Application WB
Primary Accession P25116
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 47 KDa
Antigen Region 10-39

# **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

### **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

#### **Thrombin Receptor Antibody - 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:<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 upregulation 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**

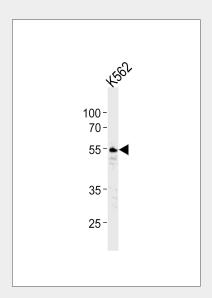
Platelets and vascular endothelial cells.

### **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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

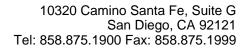
## **Thrombin Receptor Antibody - Images**



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.

### **Thrombin Receptor Antibody - 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.





# **Thrombin Receptor Antibody - References**

Vu T.-K.H.,et al.Cell 64:1057-1068(1991).
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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).