

Thrombin R Polyclonal Antibody

Catalog # AP72828

Product Information

Application WB, IHC-P, IF, ICC, E

Primary Accession P25116

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalCalculated MW47441

Additional Information

Gene ID 2149

Other Names F2R; CF2R; PAR1; TR; Proteinase-activated receptor 1; PAR-1; Coagulation

factor II receptor; Thrombin receptor

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

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:30568593, PubMed:34831181).

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

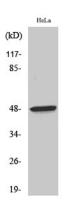
protein {ECO:0000250 | UniProtKB:P26824}

Tissue Location Platelets and vascular endothelial cells.

Background

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.

Images



Western Blot analysis of various cells using Thrombin R Polyclonal Antibody

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