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Goat Anti-F2R / PAR1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1391a

Specification

Goat Anti-F2R / PAR1 Antibody - Product Information

Application	**WB, E**
Primary Accession	P25116
Other Accession	NP_001983, 2149
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**47441**

Goat Anti-F2R / PAR1 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~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-F2R / PAR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-F2R / PAR1 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.

Goat Anti-F2R / PAR1 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 Cytomety
- Cell Culture

Goat Anti-F2R / PAR1 Antibody - Images

AF1391a (0.5 µg/ml) staining of HeLa lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-F2R / PAR1 Antibody - Background

Coagulation factor II receptor is a 7-transmembrane receptor involved in the regulation of thrombotic response. Proteolytic cleavage leads to the activation of the receptor. F2R is a G-protein coupled receptor family member.

Goat Anti-F2R / PAR1 Antibody - References

Platelet gene polymorphisms and risk of bleeding in patients undergoing elective coronary angiography: A genetic substudy of the PRAGUE-8 trial. Motovska Z, et al. Atherosclerosis, 2010 Jul 16. PMID 20691446.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
The interaction between coagulation factor 2 receptor and interleukin 6 haplotypes increases the risk of myocardial infarction in men. Gigante B, et al. PLoS One, 2010 Jun 24. PMID 20585578.
Thrombin stimulation of proteoglycan synthesis in vascular smooth muscle is mediated by protease-activated receptor-1 transactivation of the transforming growth factor beta type I receptor. Burch ML, et al. J Biol Chem, 2010 Aug 27. PMID 20571025.
Etk/Bmx regulates proteinase-activated-receptor1 (PAR1) in breast cancer invasion: signaling partners, hierarchy and physiological significance. Cohen I, et al. PLoS One, 2010 Jun 15. PMID 20559570.