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Anti-PAR2 Picoband Antibody
Catalog # ABO12386

Specification

Anti-PAR2 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P55085
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Proteinase-activated receptor 2(F2RL1) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PAR2 Picoband Antibody - Additional Information

Gene ID 2150

Other Names
Proteinase-activated receptor 2, PAR-2, Coagulation factor II receptor-like 1, G-protein coupled receptor 11, Thrombin receptor-like 1, Proteinase-activated receptor 2, alternate cleaved 1, Proteinase-activated receptor 2, alternate cleaved 2, F2RL1, GPR11, PAR2

Calculated MW
44126 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane; Multi-pass membrane protein.

Tissue Specificity
Widely expressed in tissues with especially high levels in pancreas, liver, kidney, small intestine, and colon. Moderate expression is detected in many organs, but none in brain or skeletal muscle.

Protein Name
Proteinase-activated receptor 2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human PAR2 (349-383aa HDFRDHAKNALLCRSVRTVKQMQVSLTSKKHSRKS), different from the related mouse sequence by

eight amino acids, and from the related rat sequence by seven amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-PAR2 Picoband Antibody - Protein Information

Name F2RL1

Synonyms GPR11, PAR2

Function
Receptor for trypsin and trypsin-like enzymes coupled to G proteins (PubMed:28445455). Its function is mediated through the activation of several signaling pathways including phospholipase C (PLC), intracellular calcium, mitogen-activated protein kinase (MAPK), I-kappaB kinase/NF-kappaB and Rho (PubMed:28445455). Can also be transactivated by cleaved F2R/PAR1. Involved in modulation of inflammatory responses and regulation of innate and adaptive immunity, and acts as a sensor for proteolytic enzymes generated during infection. Generally is promoting inflammation. Can signal synergistically with TLR4 and probably TLR2 in inflammatory responses and modulates TLR3 signaling. Has a protective role in establishing the endothelial barrier; the activity involves coagulation factor X. Regulates endothelial cell barrier integrity during neutrophil extravasation, probably following proteolytic cleavage by PRTN3 (PubMed:23202369). Proposed to have a bronchoprotective role in airway epithelium, but also shown to compromise the airway epithelial barrier by interrupting E-cadherin adhesion (PubMed:10086357). Involved in the regulation of vascular tone; activation results in hypotension presumably mediated by vasodilation. Associates with a subset of G proteins alpha subunits such as GNAQ, GNA11, GNA14, GNA12 and GNA13, but probably not with G(o)-alpha, G(i) subunit alpha-1 and G(i) subunit alpha-2. However, according to PubMed:21627585 can signal through G(i) subunit alpha. Believed to be a class B receptor which internalizes as a complex with arrestin and traffic with it to endosomal vesicles, presumably as desensitized receptor, for extended periods of time. Mediates inhibition of TNF-alpha stimulated JNK phosphorylation via coupling to GNAQ and GNA11; the function involves dissociation of RIPK1 and TRADD from TNFR1. Mediates phosphorylation of nuclear factor NF-kappa-B RELA subunit at 'Ser-536'; the function involves IKBKB and is predominantly independent of G proteins. Involved in cellular migration. Involved in cytoskeletal rearrangement and chemotaxis through beta-arrestin-promoted scaffolds; the function is independent of GNAQ and GNA11 and involves promotion of cofilin dephosphorylation and actin filament severing. Induces redistribution of COPS5 from the plasma membrane to the cytosol and activation of the JNK cascade is mediated by COPS5. Involved in the recruitment of leukocytes to the sites of inflammation and is the major PAR receptor capable of modulating eosinophil function such as pro-inflammatory cytokine secretion, superoxide production and degranulation. During inflammation promotes dendritic cell maturation, trafficking to the lymph nodes and subsequent T-cell activation. Involved in antimicrobial response of innate immune cells; activation enhances

phagocytosis of Gram-positive and killing of Gram-negative bacteria. Acts synergistically with interferon-gamma in enhancing antiviral responses. Implicated in a number of acute and chronic inflammatory diseases such as of the joints, lungs, brain, gastrointestinal tract, periodontium, skin, and vascular systems, and in autoimmune disorders. Probably mediates activation of pro-inflammatory and pro-fibrotic responses in fibroblasts, triggered by coagulation factor Xa (F10) (By similarity). Mediates activation of barrier protective signaling responses in endothelial cells, triggered by coagulation factor Xa (F10) (PubMed:22409427).

Cellular Location
Cell membrane; Multi-pass membrane protein.

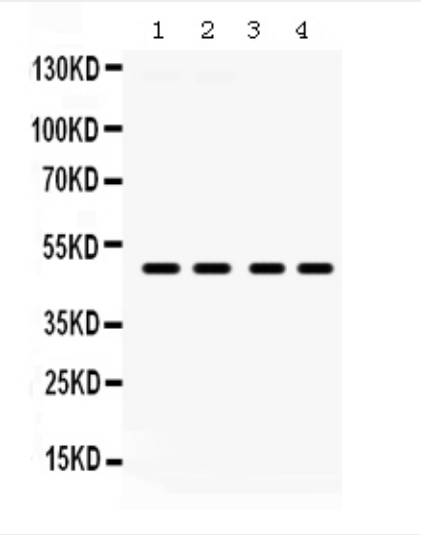
Tissue Location
Widely expressed in tissues with especially high levels in pancreas, liver, kidney, small intestine, and colon (PubMed:7556175, PubMed:8615752). Moderate expression is detected in many organs, but none in brain or skeletal muscle (PubMed:7556175, PubMed:8615752). Expressed in endothelial cells (PubMed:23202369)

Anti-PAR2 Picoband 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

Anti-PAR2 Picoband Antibody - Images



Anti- PAR2 Picoband antibody, ABO12386, Western blottingAll lanes: Anti PAR2 (ABO12386) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: COLO320 Whole Cell Lysate at 40ugLane 3: SW620 Whole Cell Lysate at 40ugLane 4: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 44KDObserved bind size: 49KD

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Anti-PAR2 Picoband Antibody - Background

Protease activated receptor 2Â (PAR2), also known asÂ coagulation factor II (thrombin) receptor-like 1(F2RL1) orÂ G-protein coupled receptor 11Â (GPR11), is aÂ proteinÂ that in humans is encoded by theÂ F2RL1Â gene. F2RL1 is a member of the large family of 7-transmembrane-region receptors that couple to guanosine-nucleotide-binding proteins. F2RL1 is also a member of the protease-activated receptor family. It is activated by trypsin, but not by thrombin. It is activated by proteolytic cleavage of its extracellular amino terminus. The new amino terminus functions as a tethered ligand and activates the receptor. The F2RL1 gene contains two exons and is widely expressed in human tissues. Additionally, PAR2 modulates inflammatory responses and acts as a sensor for proteolytic enzymes generated during infection.