
Alternate Names	Protease-activated receptor 1, coagulation factor II receptor, thrombin receptor, F2R, TR, PAR-1, CHTR
Isotype	IgG2b
Conjugate	Unconjugated
Background	Human proteinase-activated receptor 1 (PAR1), also known as thrombin receptor, is a G protein-coupled receptor (GPCR) on the cell surface with seven transmembrane domains. PAR1 is activated by thrombin cleavage of its extracellular propeptide at the N-terminus. PAR1 is highly expressed on platelets and endothelial cells. PAR1 is involved in the regulation of thrombotic response and plays a key role in mediating coagulation and inflammation, which is crucial in the pathogenesis of inflammatory and fibrotic lung diseases.

Product Details

Specificity	Detects human proteinase-activated receptor 1/PAR1 transfectants but not irrelevant transfectants in flow cytometry. Does not detect mouse PAR1 transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	PAR1 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # P25116
Formulation / Storage buffer	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant



Anti-PAR1 Monoclonal Antibody

Product Code: CABh-24076

Clone: 14A11-2H2

For Research Use Only (RUO)

Reconstitution

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:
Reconstitute with 50 µL sterile deionized water.

For 100µg product size:
Reconstitute with 200 µL sterile deionized water.

Shipping

Product is shipped at ambient temperature.

Purification

Affinity Enrichment

Stability & Storage

On receipt, store at -20 C or lower for long term storage.

This product is stable at:

-20 to -70 C for 12 months from date of receipt in lyophilized state.

-70 C for 3 months after reconstitution under sterile conditions.

Avoid repeated freeze-thaw cycles

Verified Application

ELISA, Flow cytometry, LSPR

Recommended Usage

ELISA: starting concentration 1 µg/mL

Flow cytometry: 0.8 µg/1E6 cells

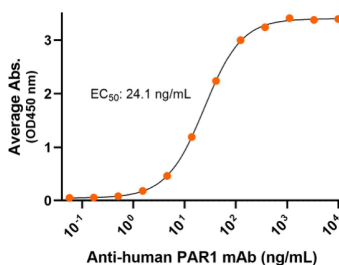
LSPR: Recommended maximum concentration, 200 nM

Bioactive Data, Detection of Antigen by:

ELISA

Anti-human PAR1 Monoclonal Antibody, ELISA

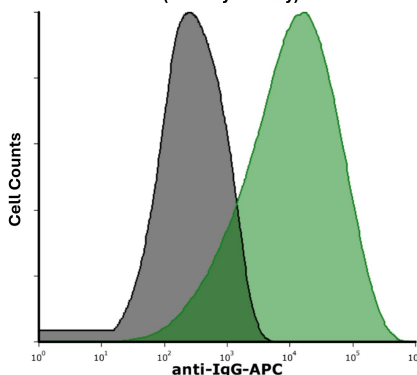
0.2µg of PAR1 ECD1 per well



Immobilized human PAR1 extracellular domain loop 1 at 2 µg/mL (100 µL/well) can bind Mouse Anti-PAR1 Monoclonal Antibody (Cat. No. CABh-24076) with half maximal effective concentration (EC₅₀) range of 12.1-48.2 ng/mL (QC tested).

Flow Cytometry

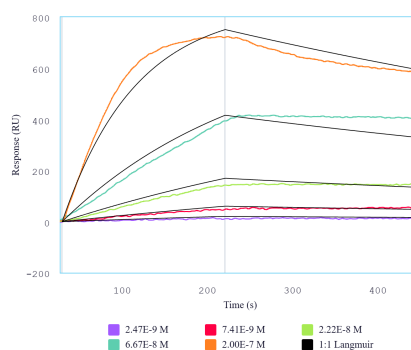
mAb binding PAR1 expressing live cells (Flow Cytometry)



Detection of PAR1 in HEK293 human cell line transiently transfected with human PAR1 by Flow Cytometry. HEK293 cell line transfected with human PAR1 was stained with isotype control (black curve) or Mouse Anti-PAR1 Monoclonal Antibody (Cat. No. CABh-24076) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

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SPR



Immobilized human PAR1 extracellular domain loop 1 can bind Mouse Anti-PAR1 Monoclonal Antibody (Cat. No. CABh-24076) with a KD of 4.8-19.1 nM as determined by SPR.

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	Mediate coagulation and inflammation
Ligand / Receptor	thrombin, activated protein C
Cell Type	platelets and endothelial cells
Molecular Family	G protein-coupled receptor
Gene ID	P25116