

# F2R

Purified Mouse Monoclonal Antibody  
Catalog # AO2642a

## Product Information

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<b>Application</b>	WB, IHC, ICC, E
<b>Primary Accession</b>	<a href="#">P25116</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	5E2E6
<b>Isotype</b>	Mouse IgG1
<b>Calculated MW</b>	47441
<b>Immunogen</b>	Purified recombinant fragment of human F2R (AA: 42-176) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	2149
<b>Other Names</b>	TR; HTR; CF2R; PAR1; PAR-1
<b>Dilution</b>	WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~N/A E~~ 1/10000
<b>Storage</b>	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.
<b>Precautions</b>	F2R is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	F2R ( <a href="#">HGNC:3537</a> )
<b>Synonyms</b>	CF2R, PAR1, TR
<b>Function</b>	High affinity receptor that binds the activated thrombin, leading to calcium release from intracellular stores (PubMed: <a href="#">1672265</a> , PubMed: <a href="#">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:[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.

## References

1.Respirology. 2015 Nov;20(8):1285-7. 2.J Neurosci. 2015 Jan 14;35(2):776-85.

## Images

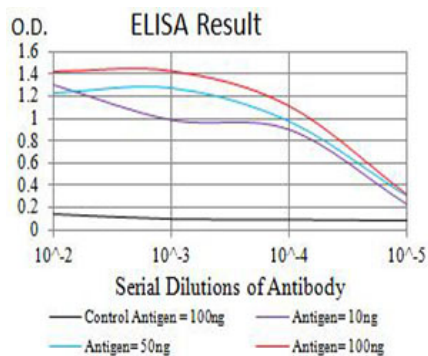


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

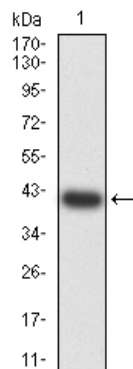


Figure 2:Western blot analysis using F2R mAb against human F2R (AA: 42-176) recombinant protein. (Expected MW is 41.3 kDa)

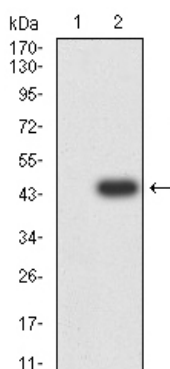


Figure 3:Western blot analysis using F2R mAb against HEK293 (1) and F2R(AA: 42-176)-hIgGfc transfected HEK293 (2) cell lysate.

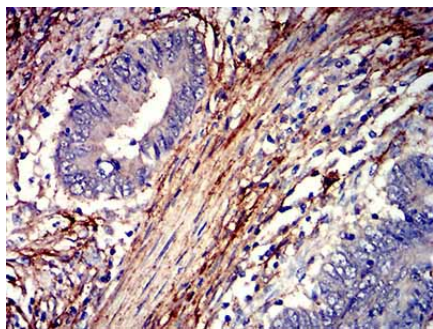


Figure 4:Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using F2R mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.