

F2R
Purified Mouse Monoclonal Antibody
Catalog # AO2642a**Specification**

F2R - Product Information

Application	WB, IHC, ICC, E
Primary Accession	P25116
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	47.4kDa KDa

Immunogen

Purified recombinant fragment of human F2R (AA: 42-176) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

F2R - Additional Information

Gene ID 2149

Other Names

TR; HTR; CF2R; PAR1; PAR-1

Dilution

WB~~ 1/500 - 1/2000

IHC~~ 1/200 - 1/1000

ICC~~N/A

E~~ 1/10000

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

F2R is for research use only and not for use in diagnostic or therapeutic procedures.

F2R - 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.

F2R - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

F2R - Images

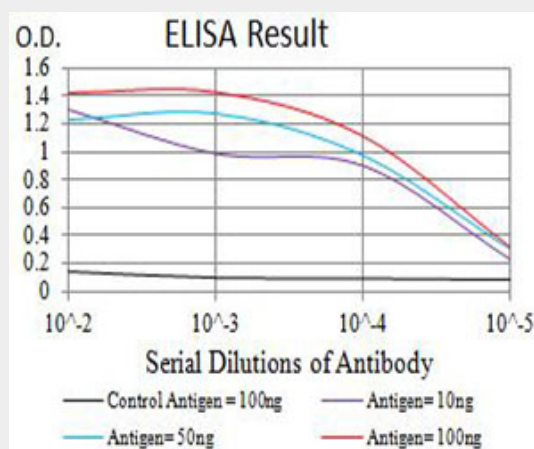


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

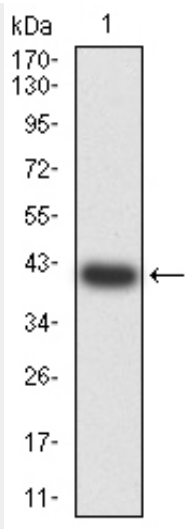


Figure 2: Western blot analysis using F2R mAb against human F2R (AA: 42-176) recombinant protein. (Expected MW is 41.3 kDa)

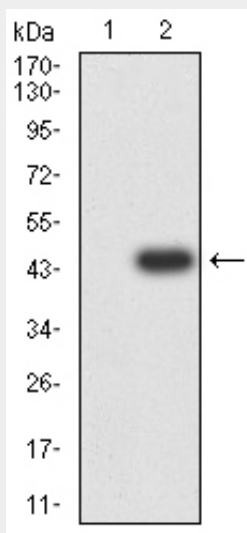


Figure 3: Western blot analysis using F2R mAb against HEK293 (1) and F2R(AA: 42-176)-hlgGfC transfected HEK293 (2) cell lysate.

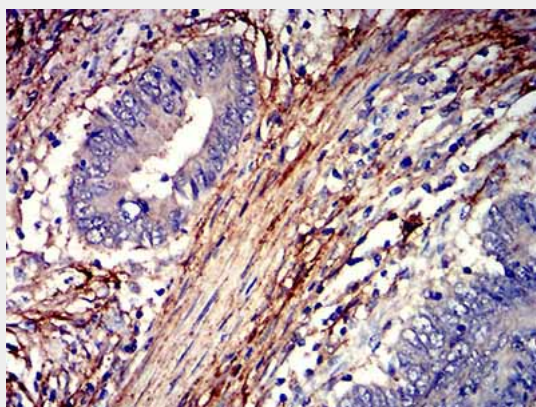


Figure 4: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using F2R mouse mAb with DAB staining.

F2R - References

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