

## **Product datasheet for AP21049PU-M**

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

## Thrombin Receptor (F2R) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WE

Recommended Dilution: Western blot: 1/500 - 1/1000.

Reactivity: Human

Host: Rabbit

Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of Thrombin R protein.

(region surrounding Ser42)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction Preservative: 15 mM sodium azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity chromatography (> 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 48 kDa

**Gene Name:** coagulation factor II thrombin receptor

**Database Link:** Entrez Gene 2149 Human

P25116



Background:

Thrombin is a serine protease that is involved in platelet aggregation and blood coagulation. It is cleaved from its precursor, prothrombin, and converts fibrinogen to fibrin in the final step of the clotting cascade. Thrombin mediates its regulatory effects by activating cell surface receptors. These receptors, including thrombin receptor (also designated PAR-1, for protease-activated receptor-1), PAR-2 and PAR-3 are members of the G-protein coupled receptor family, and share a similiar gene structure. Thrombin cleaves its receptor, releasing a 41 amino acid peptide which acts as a platelet agonist.

Upon this activation by thrombin, the thrombin receptors trigger an increase in cytosolic Ca2+ concentration. Unactivated thrombin receptor cycles between the cell surface and an intracellular pool, while activated receptor internalizes rapidly and is degraded in the lysosomes. The human thrombin receptor is also known to be regulated by Sp1 and Sp3 transcription factors.

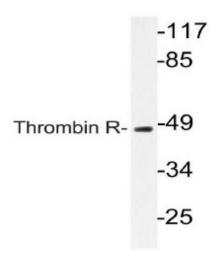
**Synonyms:** Proteinase-activated receptor 1, PAR-1, PAR1, CF2R

**Protein Families:** Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Complement and coagulation cascades, Endocytosis, Neuroactive

ligand-receptor interaction, Regulation of actin cytoskeleton

## **Product images:**



Western blot (WB) analyzes of Thrombin R antibody (Cat.-No.: [AP21049PU-N]) in extracts from Jurkat cells.