

## Human Protease Activated Receptor Signaling PCR Array

**Protease Activated Receptors (PARs):** F2R (PAR1), F2RL1 (PAR2), F2RL2 (PAR3), F2RL3 (PAR4).

**Proteases Activating PARs:** CTSG, F10, F2 (Thrombin), F3 (Tissue Factor), F7, MMP1, PLG, PROC (Protein C)

**Thrombin Signaling:**

Ligands & Receptors: F2 (Thrombin), F2R (PAR1), F2RL1 (PAR2), F2RL2 (PAR3), F2RL3 (PAR4).

Downstream Signaling: ADCY7, AKT1, GNAI1, HRAS, IKBKB, MAP2K1 (MEK1), MAPK14, PRKCA, PRKCE, PTK2, RHOA, RHOH, RPS6KB1, SRC.

Transcription Factors: EGR1, ELK1, GATA2, NFKB1, REL, RELA.

**Adhesion:** ICAM1, ITGAM, ITGB1, KITLG, RHOA, RHOH, S1PR1, SELE, SELP, SRC, THBS1, VCAM1.

**Coagulation:** F10, F2 (Thrombin), F2R (PAR1), F2RL1 (PAR2), F2RL2 (PAR3), F2RL3 (PAR4), F3 (Tissue Factor), F7, HSPA5 (GRP78), MMP1, PLAUR (uPA), PLAUR (uPAR), PLEK, PLG, PROC (Protein C), PROCR (EPCR), SELP, SERPINB2 (PAI-2), SERPINE1 (PAI-1), TFPI, THBD, THBS1.

**Regulated Genes:**

**Activated Protein C Signaling:** CD55, DKK1, ETS1, F3, HBEGF (DTR), IL6, IL8, JUNB, NFATC1, PLAUR (uPAR), PTGS2 (COX2), PTPN11, RELA, SERPINB2 (PAI-2), THBS1, TP53, VEGFA.

**Thrombin Signaling:** CCL2 (MCP-1), CD55, DKK1, ETS1, F3, HBEGF (DTR), HMGCR, IL1B, IL6, IL8, JUNB, KDR, KITLG, MIF, NAB2, NFATC1, PLAUR (uPAR), PTGS2 (COX2), PTPN11, SERPINB2 (PAI-2), S1PR3, THBS1, TNF, VEGFA.

**Factor VIIa/PAR1/2 Signaling:** CDKN1A (p21CIP1/WAF1), CSF2 (GM-CSF), CTGF, NFKB1, PLAUR (uPA), SERPINE1 (PAI-1).

**Factor VIIa/PAR2 Signaling:** CSF1 (MCSF), CSF2 (GM-CSF), CXCL1, CYR61, ITGB1, VEGFC.

**TLR4/PAR2:** IL10, IL13, IL4, IL6, TNF.

**Other Targets:** GJA1, MMP2, SELE, SELP, SERPINB5 (Maspin), TGFB1, VCAM1.

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