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Factor X HC Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51201

Product Information

Application WB Primary Accession P00742

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW54732

Additional Information

Gene ID 2159

Other Names Coagulation factor X, Stuart factor, Stuart-Prower factor, Factor X light chain,

Factor X heavy chain, Activated factor Xa heavy chain, F10

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name F10

Function Factor Xa is a vitamin K-dependent glycoprotein that converts prothrombin

to thrombin in the presence of factor Va, calcium and phospholipid during blood clotting (PubMed:22409427). Factor Xa activates pro-inflammatory signaling pathways in a protease-activated receptor (PAR)-dependent manner

(PubMed:<u>24041930</u>, PubMed:<u>30568593</u>, PubMed:<u>34831181</u>,

PubMed:<u>18202198</u>). Up-regulates expression of protease- activated receptors (PARs) F2R, F2RL1 and F2RL2 in dermal microvascular endothelial cells (PubMed:<u>35738824</u>). Triggers the production of pro- inflammatory cytokines, such as MCP-1/CCL2 and IL6, in cardiac fibroblasts and umbilical vein endothelial cells in PAR-1/F2R-dependent manner (PubMed:<u>30568593</u>, PubMed:<u>34831181</u>). Triggers the production of pro-inflammatory cytokines, such as MCP-1/CCL2, IL6, TNF-alpha/TNF, IL- 1beta/IL1B, IL8/CXCL8 and IL18, in endothelial cells and atrial tissues (PubMed:<u>24041930</u>, PubMed:<u>35738824</u>, PubMed:<u>9780208</u>). Induces expression of adhesion molecules, such as ICAM1, VCAM1 and SELE, in endothelial cells and atrial tissues (PubMed:<u>24041930</u>, PubMed:<u>35738824</u>, PubMed:<u>9780208</u>). Increases expression of

phosphorylated ERK1/2 in dermal microvascular endothelial cells and atrial tissues (PubMed:<u>24041930</u>, PubMed:<u>35738824</u>). Triggers activation of the

transcription factor NF-kappa-B in dermal microvascular endothelial cells and atrial tissues (PubMed:24041930, PubMed:35738824). Activates pro-inflammatory and pro-fibrotic responses in dermal fibroblasts and enhances wound healing probably via PAR-2/F2RL1-dependent mechanism (PubMed:18202198). Activates barrier protective signaling responses in endothelial cells in PAR-2/F2RL1-dependent manner; the activity depends on the cleavage of PAR-2/F2RL1 by factor Xa (PubMed:22409427). Up- regulates expression of plasminogen activator inhibitor 1 (SERPINE1) in atrial tissues (PubMed:24041930).

Cellular Location Secreted.

Tissue Location Plasma; synthesized in the liver.

Background

Factor Xa is a vitamin K-dependent glycoprotein that converts prothrombin to thrombin in the presence of factor Va, calcium and phospholipid during blood clotting.

References

Messier T.L.,et al.Gene 99:291-294(1991). Leytus S.P.,et al.Biochemistry 25:5098-5102(1986). Fung M.R.,et al.Proc. Natl. Acad. Sci. U.S.A. 82:3591-3595(1985). Kaul R.K.,et al.Gene 41:311-314(1986). McMullen B.A.,et al.Biochemistry 22:2875-2884(1983).

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