10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Factor X HC Antibody

Catalog # AP51201

Product Information

Application	WB
Primary Accession	P00742
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54732

Additional Information

Gene ID	2159
Other Names	Coagulation factor X; Stuart factor; Stuart-Prower factor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Factor X HC. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
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, PubMed:39880037). Factor Xa activates pro-inflammatory signaling pathways in a protease- activated receptor (PAR)-dependent manner (PubMed:24041930, PubMed:30568593, PubMed:34831181, PubMed:18202198). Up-regulates expression of protease-activated receptors (PARs) F2R, F2RL1 and F2RL2 in dermal microvascular endothelial cells (PubMed:35738824). 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:30568593, PubMed:34831181). Triggers the production of pro-inflammatory cytokines, such as MCP-1/CCL2, IL6, TNF/TNF, IL-1beta/IL1B, IL8/CXCL8 and IL18, in endothelial cells and atrial tissues (PubMed:24041930, PubMed:35738824, PubMed:9780208). Induces expression of adhesion molecules, such as ICAM1, VCAM1 and SELE, in endothelial cells and atrial tissues (PubMed:24041930, PubMed:35738824,

PubMed:9780208). Increases expression of phosphorylated ERK1/2 in dermal microvascular endothelial cells and atrial tissues (PubMed:24041930, PubMed:35738824). 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).

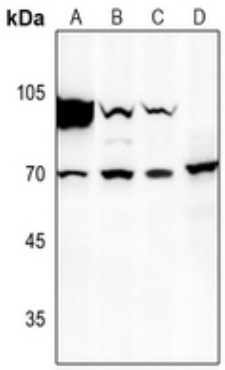
Cellular Location Secreted.

Tissue Location Plasma; synthesized in the liver.

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).

Images



Western blot analysis of Factor X HC expression in LO2 (A), PC3 (B), MCF7 (C), EC9706 (D) whole cell lysates. (Predicted band size: 54 kD; Observed band size: 70 kD)

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