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Anti-Factor I Antibody

Catalog # AP51750

Product Information

Application	WB, IHC
Primary Accession	P05156
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65750

Additional Information

Gene ID	3426
Other Names	IF; Complement factor I; C3B/C4B inactivator
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Factor I. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
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

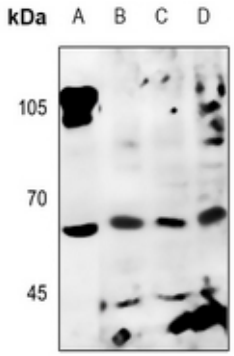
Name	CFI
Synonyms	IF
Function	Trypsin-like serine protease that plays an essential role in regulating the immune response by controlling all complement pathways. Inhibits these pathways by cleaving three peptide bonds in the alpha- chain of C3b and two bonds in the alpha-chain of C4b thereby inactivating these proteins (PubMed:17320177, PubMed:7360115). Essential cofactors for these reactions include factor H and C4BP in the fluid phase and membrane cofactor protein/CD46 and CR1 on cell surfaces (PubMed:12055245, PubMed:2141838, PubMed:9605165). The presence of these cofactors on healthy cells allows degradation of deposited C3b by CFI in order to prevent undesired complement activation, while in apoptotic cells or microbes, the absence of such cofactors leads to C3b-mediated complement activation and subsequent opsonization (PubMed:28671664).
Cellular Location	Secreted, extracellular space. Secreted

Tissue Location	Expressed in the liver by hepatocytes (PubMed:6327681). Also present in other cells such as monocytes, fibroblasts or keratinocytes (PubMed:17320177, PubMed:6444659)

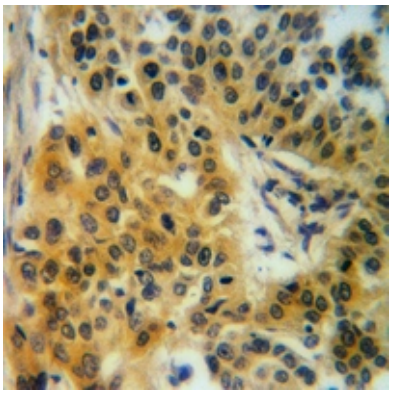
References

Catterall C.F.,et al.Biochem. J. 242:849-856(1987).
Goldberger G.,et al.J. Biol. Chem. 262:10065-10071(1987).
Hillier L.W.,et al.Nature 434:724-731(2005).
Minta J.O.,et al.Gene 208:17-24(1998).
Ullman C.G.,et al.FEBS Lett. 371:199-203(1995).

Images



Western blot analysis of Factor I expression in A549 (A), mouse kidney (B), rat liver (C), rat kidney (D) whole cell lysates. (Predicted band size: 65 kD; Observed band size: 66 kD)



Immunohistochemical analysis of Factor I staining in human kidney cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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