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Factor I Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51750

Product Information

Application WB Primary Accession P05156

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW65750

Additional Information

Gene ID 3426

Other Names Complement factor I, C3B/C4B inactivator, Complement factor I heavy chain,

Complement factor I light chain, CFI, IF

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human Factor I. The exact sequence is proprietary.

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 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)

Background

Responsible for cleaving the alpha-chains of C4b and C3b in the presence of the cofactors C4-binding protein and factor H respectively.

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).

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