

Factor I Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51750

Specification

Factor I Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
P05156
Human, Mouse, Rat
Rabbit
Polyclonal
88 KDa

Factor I Antibody - 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

Dilution

WB~~1:1000 E~~N/A

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

Factor I Antibody - 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)

Factor I Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Factor I Antibody - Images

Factor I Antibody - Background

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

Factor I Antibody - 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).