

CFI (light chain) Blocking Peptide (C-term) Synthetic peptide

Catalog # BP21688b

Specification

CFI (light chain) Blocking Peptide (C-term) - Product Information

Primary Accession

<u>P05156</u>

CFI (light chain) Blocking Peptide (C-term) - 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 The synthetic peptide sequence is selected from aa 467-482 of HUMAN CFI

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CFI (light chain) Blocking Peptide (C-term) - 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: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)

CFI (light chain) Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

CFI (light chain) Blocking Peptide (C-term) - Images

CFI (light chain) Blocking Peptide (C-term) - Background

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

CFI (light chain) Blocking Peptide (C-term) - 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).