
Recombinant Mouse Complement Component C5Protein**Cat.NO.: TP05637**

3th Edition

Synonyms: Complement C5; Hemolytic Complement; C5; Hc

Description: Mouse Complement C5 (C5a) is a glycoprotein that belongs to a family of structurally and functionally related proteins known as anaphylatoxins. C5a is a 77 amino acid peptide that is created by the C5a convertase proteolytic cleavage of C5 α chain in the classical and alternative complement pathway (C4b2a3b, C3bBb3b). Mouse C5a has four α helices, plus three intra-chain disulfide bonds that form a triple loop structure. C5a functions via G-protein coupled receptor (GPCR) (C5aR/CD88). C5a is a potent chemoattractant and anaphylatoxin that acts on all classes of leukocytes and on many other cell types including endothelial, smooth muscle, kidney, liver, and neural cells. It mediates IL-8 release from bronchial epithelial cells. It also triggers an oxidative burst in macrophages and neutrophils, causing release of histamine in basophils and mast cells. C5a anaphylatoxin activity on hepatocytes results indirectly from interaction with nonparenchymal cell via prostanoid secretion. Mouse C5a shares 60% and 82% sequence identity to human and rat C5a, respectively.

Form: PBS**Molecular Weight:** 9.0 kDa**Sequences:** Asn679-Arg755**Purity:** > 95% by HPLC**Concentration:****Endotoxin Level:** <1.0 EU per 1 μ g of protein (determined by LAL method)**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.