

## 32-3386: mC5a Recombinant Protein

**Alternative Name :** Complement C5,Hemolytic complement,C5,Hc,He,C5a.

### Description

Source : Escherichia Coli. C5a Mouse Recombinant produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 77 amino acids and having a molecular mass of 9kDa. The Mouse C5a is purified by proprietary chromatographic techniques. Mouse Complement 5a (C5a) is a glycoprotein which is a member of a family of structurally and functionally related proteins known as anaphylatoxins. C5a is a 77 a.a. peptide created by the C5a convertase proteolytic cleavage of C5 chain in the classical and alternative complement pathway (C4b2a3b, C3bBb3b). The mouse C5a has four helices and three intrachain disulfide bonds which form a triple loop structure. C5a functions through G-protein coupled receptor (GPCR) (C5aR/CD88). C5a is an effective chemoattractant and anaphylatoxin which functions on all classes of leukocytes and on many other cell types including endothelial, smooth muscle, kidney, liver, and neural cells. Mouse C5a also mediates IL-8 release from bronchial epithelial cells. Furthermore, it triggers an oxidative surge in macrophages and neutrophils, causing the release of histamine in basophils and mast cells. The C5a anaphylatoxin activity on hepatocytes results indirectly from interaction with nonparenchymal cell via prostanoid secretion.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	Mouse C5a was lyophilized from a concentrated (1mg/ml) solution in 20mM PB, pH 7.5 and 350mM NaCl.
<b>Storage condition :</b>	Lyophilized Mouse C5a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Mouse C5a should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Asn-Leu-His-Leu-Leu.

### Application Note

It is recommended to reconstitute the lyophilized Mouse C5a in sterile 18MΩ•cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> of Recombinant Mouse C5a as determined by its ability to induce N-acetyl-b-D-glucosaminidase release from differentiated U937 human histiocytic lymphoma cells was 5-20ng/ml.

