# **Recombinant Mouse Complement C5a (His-Tag)**

CATALOG #:	4895A-20 4895A-100 4895A-1000	20 µg 100 µg 1 mg	
LOT #:			
SOURCE:	E. coli		
PURITY:	>98% by SDS-PAGE. Endotoxin level is <0.1 ng per µg of C5a.		
FORM:	Lyophilized recombinant C5a protein containing no additives		

## **RECONSTITUTION:**

Centrifuge theC5a protein vial prior to opening. Reconstitute C5a to a concentration of 1.0 mg/ml in ice-cold water containing 2.5 mg/ml BSA. The C5a solution should be aliquoted and immediately stored at -70°C for future use. Frozen/thaw may result in some loss of activity.

### STORAGE CONDITIONS:

Store at -20  $^\circ\text{C}$  or -70  $^\circ\text{C}$  as supplied. Stable for at least 1 year. After reconstitution, store at 70  $^\circ\text{C}$ .

#### **DESCRIPTION:**

Mouse complement C5a is a 77-amino acid peptide generated during complement activation from the  $\alpha$ -chain of complement C5. Mouse C5a shares 60% and 82% amino acid sequence identity to human and rat C5a, respectively. C5a binds to a signaling G-protein coupled receptor (GPCR) (C5aR/CD88), inducing neutrophil chemotaxis and endothelial cell activation. It also triggers an oxidative burst in macrophages and neutrophils, and induces release of histamine in basophils and mast cells. The 9 kDa mouse C5a protein expressed in *E. coli* contains a His-Tag sequence.

## **BIOLOGICAL ACTIVITY:**

Recombinant Mouse C5a protein is as active as that of serum derived C5a based on enzyme release assay of myeloperoxidase. The current lot of  $ED_{50}$  = 1-3 nM.

FOR RESEARCH USE ONLY! Not to be used on humans.

#### **RELATED PRODUCTS:**

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Apoptosis Inducers and Set

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC & HAT Fluorometric & Colorimetric Assays & Drug Discovery Kits
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

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- Recombinant Adiponectin, Survivin, & Leptin
- CETP & PLTP Activity Assay & Drug Discovery Kits
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- Lactate, pyruvate, Ascorbic Acid, Glycogen, Aconitase Assay Kits
- ATP, ADP, Amino Acids, Calcium, Iron, FAD, Urea, Ammonia Assay Kits
- Catalase, Coenzyme A, Citrate, Choline, Ethanol, Fatty Acid Assay Kits
- Creatine, Creatinine, Glutathione, Nitric Oxide, glycerol Assay Kits
- Heme, Hydrogen Peroxide, b-HB, a-Ketoglutarate, NAD(P)/NAD(P)H Assays
- Sarcosine, Sialic Acid, Starch, Thioredoxin, Chloride, Glutamate Assay Kits

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

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