

## Complement Component 5a (C5a) Active Protein | C5a active protein

Active Complement Component 5a (C5a)

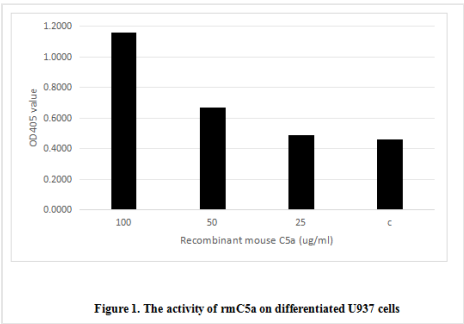
|                               |                          |                                                     |
|-------------------------------|--------------------------|-----------------------------------------------------|
| CATALOG #<br><b>AAA161727</b> | HOST<br><b>293F cell</b> | APPLICATIONS<br><b>Activity Assay, Cell Culture</b> |
|-------------------------------|--------------------------|-----------------------------------------------------|

### PRODUCT SYNONYMS

Complement Component 5a (C5a); Active Complement Component 5a (C5a); Complement Component 5a; C5a active protein (eukaryotic; 293F cell); Mouse4; C5a active protein

### PRODUCT SPECIFICATIONS

|                                                |                                                                                              |
|------------------------------------------------|----------------------------------------------------------------------------------------------|
| Host                                           | 293F cell                                                                                    |
| Purity/Purification                            | Greater than 90% by SDS-PAGE                                                                 |
| Form/Format                                    | Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| Sequence                                       | Asn679~Arg 755                                                                               |
| Applicable Applications for C5a active protein | Activity Assay, Cell Culture                                                                 |
| Species                                        | Mouse                                                                                        |
| Expression System                              | Eukaryotic expression                                                                        |
| Tag                                            | N-terminal His Tag and C-terminal Fc Region of Human IgG1                                    |
| Endotoxin Level                                | <1.0EU per 1ug (determined by the LAL method)                                                |
| Isoelectric Point                              | 9.4                                                                                          |
| Research Area                                  | Infection immunity, Immune molecule, Autoimmunity                                            |
| Preparation and Storage                        | Store at 2-8 degree C for one month, -80 degree C for 12 months                              |

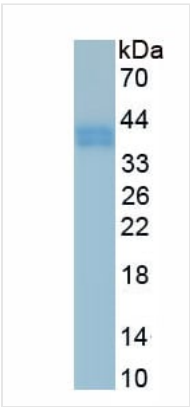


Bioactivity

Complement Component 5a (C5a) is a component of the complement system which plays a key role in promoting migration and adherence of neutrophils and monocytes to vessel walls. The activity of recombinant human C5a was also measured by its ability to induce N-acetyl-beta-D-glucosaminidase release from differentiated U937 human histiocytic lymphoma cells. 3.2\*10<sup>6</sup> differentiated U937 cells were added to the 24-well plate and different concentrations of rhC5a was added to the 24-well plate and incubated at 37 degree C for 3min. The cells were centrifuged at 400 g for 3min, and the supernatant contained N-acetyl-beta-D-glucosaminidase. The enzyme activity of N-acetyl-beta-D-glucosaminidase was measured by the substrate of 4-Nitrophenyl 2-acetamido-2-deoxy-beta-D-glucopyranoside. The result was shown in figure 1, It was obvious that rhC5a can significantly induce N-acetyl-beta-D-glucosaminidase release.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

|                                                  |                 |
|--------------------------------------------------|-----------------|
| Product Categories/Family for C5a active protein | Active proteins |
|--------------------------------------------------|-----------------|

NCBI AND UNIPROT INFORMATION

|                                  |                             |
|----------------------------------|-----------------------------|
| NCBI GI #                        | 6754164                     |
| NCBI GeneID                      | 15139                       |
| NCBI Accession #                 | NP_034536.1                 |
| NCBI GenBank Nucleotide #        | NM_010406.2                 |
| UniProt Accession #              | P06684; A2AS36              |
| NCBI Official Full Name          | complement C5 preproprotein |
| NCBI Official Synonym Full Names | hemolytic complement        |
| NCBI Official Symbol             | Hc                          |
| NCBI Official Synonym Symbols    | C5; He; C5a                 |
| NCBI Protein Information         | complement C5               |
| UniProt Protein Name             | Complement C5               |
| UniProt Gene Name                | C5                          |
| UniProt Synonym Gene Names       | Hc                          |
| UniProt Entry Name               | CO5_MOUSE                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.