

## Active Recombinant Human C5 protein, His&hFc-tagged

**Cat. No.** C5-3092H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Active Recombinant Human C5 protein(P01031)(678~751 aa), fused with N-terminal His tag and C-terminal hFc tag, was expressed in HEK293.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>ProteinLength</b>    | 678-751 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Form</b>             | Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Bio-activity</b>     | 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. C5a has been proven to be able to induce chemotactic migration of THP-1 cells. Therefore, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of C5a on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100μ cell suspension, 10 <sup>6</sup> cells/mL in RPMI 1640 with 0.5% FBS) and C5a (50ng/mL and 100ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8μ pore size) used to separate the two compartments. After incubation at 37°C with 5% CO <sub>2</sub> for 2h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×100) and the number of migrated cells were counted at high magnification (×400) randomly (five |

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fields for each filter). Result: C5a is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification (×100) were shown.

|                       |                                                                                                            |
|-----------------------|------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | 35.0kDa                                                                                                    |
| <b>Endotoxin</b>      | <1.0EU per 1µg (determined by the LAL method).                                                             |
| <b>Purity</b>         | > 95% as determined by SDS-PAGE.                                                                           |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months. |
| <b>Reconstitution</b> | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                       |

## GENE INFORMATION

|                        |                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | C5 complement component 5 [ Homo sapiens ]                                                                                                                                     |
| <b>Official Symbol</b> | C5                                                                                                                                                                             |
| <b>Synonyms</b>        | C5; complement component 5; complement C5; CPAMD4; anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4; FLJ17816; FLJ17822; MGC142298; |
| <b>Gene ID</b>         | 727                                                                                                                                                                            |
| <b>mRNA Refseq</b>     | NM_001735                                                                                                                                                                      |
| <b>Protein Refseq</b>  | NP_001726                                                                                                                                                                      |

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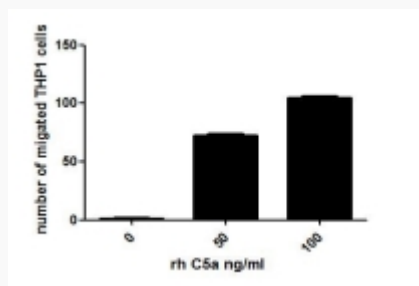
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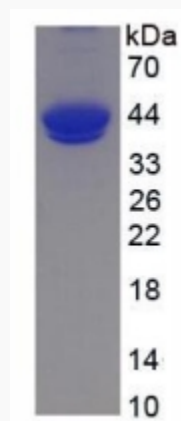
**MIM** 120900

**UniProt ID** P01031

**Activity**



**SDS-PAGE**



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