

Recombinant Human Complement C5a Protein

Catalog Number: PKSH033742

Note: Centrifuge before opening to ensure complete recovery of vial contents.

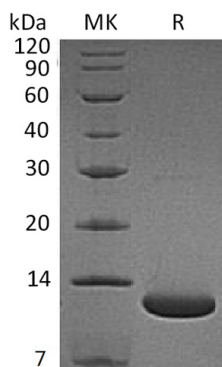
Description

Species	Human
Source	E.coli-derived Human Complement C5a protein Thr678-Arg751
Calculated MW	8.4 kDa
Observed MW	12 kDa
Accession	P01031
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Human Complement 5a (C5a) is an enzymatically generated glycoprotein that belongs to a family of structurally and functionally related proteins known as anaphylatoxins. C5a is a 74 amino acid (aa) peptide that is created by the activity of C5a convertase on the C5 α -chain. Human C5a has four α -helices plus three intrachain disulfide bonds that create a triple loop structure. Human C5a is 60% and 54% aa identical to mouse and rat C5a, respectively. C5a binds to a signaling G-protein coupled receptor (C5aR/CD88) and a non-signaling GPCR termed C5L2. Activation of Cd88 results in 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.

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