

## HUMAN C5 PROTEIN

**Cat.#:** 12273

**Product Name:** Human C5 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** C5D;C5a;C5b;ECLZB;CPAMD4

**Target:** C5

**UNIPROT ID:** P01031

**Description:** Recombinant human C5 Protein with C-terminal 10xHis tag

**Background:** This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the C5 alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mutations in this gene cause complement component 5 deficiency, a disease characterized by recurrent bacterial infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2015]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 187.9 kDa after removal of the signal peptide.

**Molecular Characterization:** C5(Gln19-Cys1676) 10xHis tag

**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

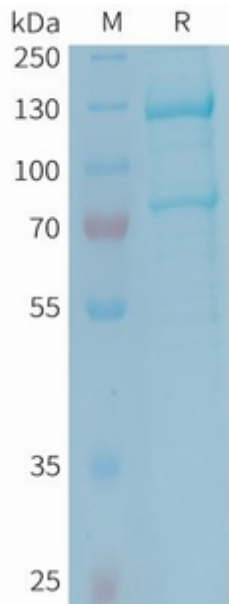


Figure 1. Human C5 Protein, His Tag on SDS-PAGE under reducing condition.