

HUMAN TLR3 PROTEIN, HFC TAG**Cat.#:** 11720**Product Name:** Human TLR3 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** TLR3**Target:** TLR3**UNIPROT ID:** O15455**Description:** Recombinant human TLR3 protein with C-terminal human Fc tag

Background: The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF- κ B and the production of type I interferons. It may thus play a role in host defense against viruses. Use of alternative polyadenylation sites to generate different length transcripts has been noted for this gene. [provided by RefSeq, Jul 2008]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 103.5 kDa after removal of the signal peptide. The apparent molecular mass of TLR3-hFc is approximately 130-180 kDa due to glycosylation.

Molecular Characterization: TLR3(Glu28-Pro80) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% 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 TLR3 Protein, hFc Tag on SDS-PAGE under reducing condition.