

PRODUCT INFORMATION

C-Flag&Strep Tag Tag

Target TLR7

Storage & Shipping

Background

IMD74; TLR7-like **Synonyms**

Human TLR7-Strep full length protein-synthetic **Description**

nanodisc **Delivery** 6~8weeks **Uniprot ID** Q9NYK1 **Expression Host HEK293**

Protein Families Druggable Genome, Transmembrane **Protein Pathways** Toll-like receptor signaling pathway

The human full length TLR7-Strep protein has a **Molecular Weight**

MW of 120.9 kDa

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

lyophilization. Please see Certificate of Analysis

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.

The protein 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. The human TLR family comprises 11 members. 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. For the recognition of structural components in foreign microorganisms, the various TLRs exhibit different patterns of expression as well; in this way for example, TLR-3, -7, and -8 are essential in the recognition of single-stranded RNA viruses.

TLR7 senses single-stranded RNA oligonucleotides containing guanosine- and uridine-rich sequences from RNA viruses, a recognition occuring in the endosomes of plasmacytoid dendritic cells and B

cells.

Usage Research use only Conjugate Unconjugated





