## **Nanodisc Human TLR7-Strep Protein**



## HDFP880

**Product Information** 

Product SKU: HDFP880 Expression Host: HEK293 Size: 10μg

**Target**: TLR7 **Tag**: C-Flag&Strep Tag

**Additional Information** 

Conjugate: Unconjugated Uniprot ID: Q9NYK1

**Molecular Weight:** The human full length TLR7-Strep protein has a MW of 120.9 kDa

## **Protein Information**

**Background**: 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.

**Synonyms**: IMD74; TLR7-like

**Protein Description**: Human TLR7-Strep full length protein-synthetic nanodisc

Formulation: 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. Please

see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater

than 5 mM) in subsequent experiments.

**Protein Pathways**: Toll-like receptor signaling pathway.

**Protein Families:** Druggable Genome, Transmembrane.

**Usage**: Research use only

**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.