

Datasheet for ABIN7596620

**TLR4 Protein (DYKDDDDK Tag, Strep Tag)**[Go to Product page](#)

## Overview

Quantity:	10 µg
Target:	TLR4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This TLR4 protein is labelled with DYKDDDDK Tag, Strep Tag.
Application:	Immunogen (Imm), ELISA, Surface Plasmon Resonance (SPR), Phage Display (PhD), Cryogenic electron microscopy (cryo-EM)

## Product Details

Purpose:	Human TLR4-Strep full length protein-synthetic nanodisc
----------	---

## Target Details

Target:	TLR4
Alternative Name:	TLR4 ( <a href="#">TLR4 Products</a> )
Background:	<p>ARMD10, CD284, TLR-4</p> <p>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. They recognize pathogen-associated molecular patterns 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. In silico studies have found a particularly strong</p>

## Target Details

binding of surface TLR4 with the spike protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of Coronavirus disease-2019 (COVID-19). This receptor has also been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness, and with susceptibility to age-related macular degeneration.

Molecular Weight: The human full length TLR4-Strep protein has a MW of 95.7 kDa

UniProt: [O00206](#)

Pathways: [TLR Signaling](#), [Activation of Innate immune Response](#), [Cellular Response to Molecule of Bacterial Origin](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Toll-Like Receptors Cascades](#), [Inflammasome](#), [S100 Proteins](#)

## Application Details

Comment: Advantages:

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane environment and remain biologically active
- No detergent and can be used for cell-based assays
- No MSP backbone proteins
- Mammalian cell expression system ensures post- translational modifications

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage: -20 °C,-80 °C

Storage Comment: 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.

Expiry Date: 12 months