HUMAN TLR4 FULL LENGTH PROTEIN

Cat.#: 11122
Product Name: Human TLR4 Full Length Protein
Size : 10 µg, 50 µg and 100 µg
Synonyms: ARMD10; CD284; TLR-4
Target: TLR4
UNIPROT ID: O00206
Description: Human TLR4 full length protein-synthetic nanodisc
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. 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 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.
Species/Host: HEK293
Molecular Weight: The human full length TLR4 protein has a MW of 95.7 kDa
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.

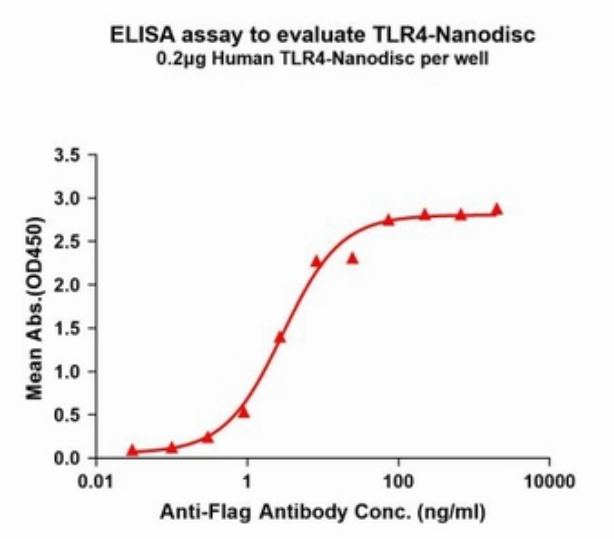

Figure1. Elisa plates were pre-coated with Flag Tag TLR4-Nanodisc (0.2 μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TLR4-Nanodisc is 2.939ng/ml.

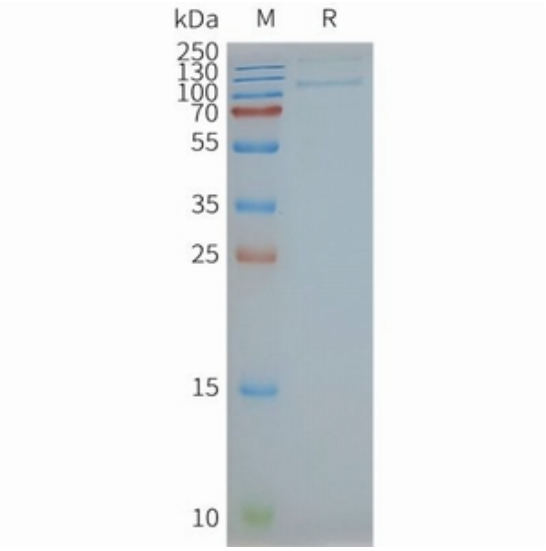

Figure2. Human TLR4-Nanodisc, Flag Tag on SDS-PAGE