

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	TLR5
<b>Synonyms</b>	MELIOS; SLE1; SLEB1; TIL3
<b>Description</b>	Human TLR5 full length protein-synthetic nanodisc
<b>Uniprot ID</b>	O60602
<b>Protein Families</b>	Druggable Genome, Transmembrane
<b>Protein Pathways</b>	Pathogenic Escherichia coli infection, Toll-like receptor signaling pathway
<b>Molecular Weight</b>	The human full length TLR5 protein has a MW of 97.8 kDa
<b>Delivery</b>	In Stock
<b>Formulation &amp; Reconstitution</b>	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.
<b>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	Toll-like receptor (TLR) family plays a fundamental role in pathogen recognition and activation of innate immune responses. These receptors recognize distinct pathogen-associated molecular patterns that are expressed on infectious agents. The protein encoded by this gene recognizes bacterial flagellin, the principal component of bacterial flagella and a virulence factor. The activation of this receptor mobilizes the nuclear factor NF-kappaB, which in turn activates a host of inflammatory-related target genes. Mutations in this gene have been associated with both resistance and susceptibility to systemic lupus erythematosus, and susceptibility to Legionnaire disease.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate TLR5-Nanodisc 0.2 $\mu$ g Human TLR5-Nanodisc per well

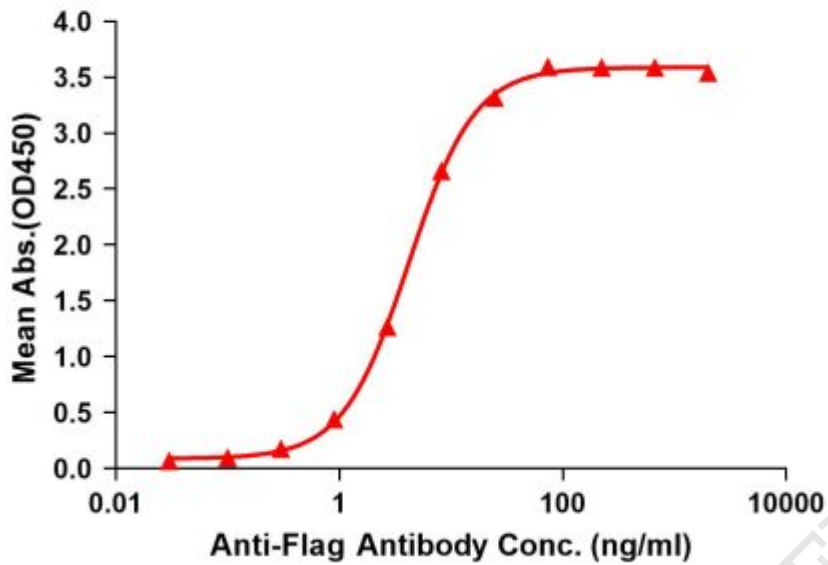


Figure1. Elisa plates were pre-coated with Flag Tag TLR5-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TLR5-Nanodisc is 4.191ng/ml.



Figure2. Human TLR5-Nanodisc, Flag Tag on SDS-PAGE

