

## TLR2 Protein, Human (sf9, His)

Cat. No.:	HY-P73591
Synonyms:	CD282; TIL4; TLR2; Toll-like receptor 2
Species:	Human
Source:	Sf9 insect cells
Accession:	O60603 (E21-R587)
Gene ID:	7097
Molecular Weight:	Approximately 65.5 kDa

### PROPERTIES

#### AA Sequence

E S S N Q A S L S C	D R N G I C K G S S	G S L N S I P S G L	T E A V K S L D L S
N N R I T Y I S N S	D L Q R C V N L Q A	L V L T S N G I N T	I E E D S F S S L G
S L E H L D L S Y N	Y L S N L S S S W F	K P L S S L T F L N	L L G N P Y K T L G
E T S L F S H L T K	L Q I L R V G N M D	T F T K I Q R K D F	A G L T F L E E L E
I D A S D L Q S Y E	P K S L K S I Q N V	S H L I L H M K Q H	I L L L E I F V D V
T S S V E C L E L R	D T D L D T F H F S	E L S T G E T N S L	I K K F T F R N V K
I T D E S L F Q V M	K L L N Q I S G L L	E L E F D D C T L N	G V G N F R A S D N
D R V I D P G K V E	T L T I R R L H I P	R F Y L F Y D L S T	L Y S L T E R V K R
I T V E N S K V F L	V P C L L S Q H L K	S L E Y L D L S E N	L M V E E Y L K N S
A C E D A W P S L Q	T L I L R Q N H L A	S L E K T G E T L L	T L K N L T N I D I
S K N S F H S M P E	T C Q W P E K M K Y	L N L S S T R I H S	V T G C I P K T L E
I L D V S N N N L N	L F S L N L P Q L K	E L Y I S R N K L M	T L P D A S L L P M
L L V L K I S R N A	I T T F S K E Q L D	S F H T L K T L E A	G G N N F I C S C E
F L S F T Q E Q Q A	L A K V L I D W P A	N Y L C D S P S H V	R G Q Q V Q D V R L
S V S E C H R			

#### Appearance

Lyophilized powder.

#### Formulation

Lyophilized from a 0.2 µm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.5, 10% Glycerol. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.

#### Endotoxin Level

<1 EU/µg, determined by LAL method.

#### Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O.

#### Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

#### Shipping

Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

TLR2 protein collaborates with LY96 to orchestrate the innate immune response against bacterial lipoproteins and various microbial cell wall components. Additionally, TLR2 forms functional complexes with either TLR1 or TLR6 to recognize bacterial lipopeptides. Through the signaling pathways involving MYD88 and TRAF6, TLR2 activation leads to NF-kappa-B activation, cytokine secretion, and the initiation of inflammatory responses. The receptor plays a pivotal role in recognizing specific ligands, such as mycoplasmal macrophage-activating lipopeptide-2kD (MALP-2) and B.burgdorferi outer surface protein A lipoprotein (OspA-L), often in cooperation with TLR6. TLR2 engages in complex interactions with other receptors, including CD14 and CD36, to form activation clusters that trigger signaling events at the cell surface before being directed to the Golgi in a lipid-raft dependent pathway. Furthermore, TLR2 is crucial for the normal uptake of M.tuberculosis, and its interactions extend to various regulatory proteins such as MYD88, TICAM1, and TIRAP.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA