

Datasheet for ABIN3137163
TLR1 Protein (AA 26-582) (His tag)



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Overview

Quantity:	1 mg
Target:	TLR1
Protein Characteristics:	AA 26-582
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TLR1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: EECELIIKRP NANLTRVPKD LPLQTTTLDL SQNNISELQT SDILSLSKLR VLIMSYNRLQ
 YLNISVFKFN TELEYLDLSH NELKVILCHP TVSLKHLDLS FNAFDALPIC KEFGNMSQLQ
 FLGLSGSRVQ SSSVQLIAHL NISKVLLVLG DAYGEKEDPE SLRHSVSTETL HIVFPSKREF
 RFLDVSVSST TIGLELSNIK CVLEDQGCSY FLRALSKLGK NLKLSNLT LN NVETTWNSEI
 NILQIVWHTP VKYFSISNVK LQGQLAFRMF NYSDTSLKAL SIHQVVTDFV SFPQSYIYSI
 FANMNIQNFT MSGTHMVHML CPSQVSPFLH VDFTDNLLTD MVFKDCRNLV RLKTLSLQKN
 QLKNLENIIL TSAKMTSLQK LDISQNSLRY SDGGIPCAWT QSLVLNLSS NMLTGSVFRC
 LPPKVKVLDL HNNRIMSIPK DVTHLQALQE LNVASNSLTD LPGCGAFSSL SVLVIDHNSV
 SHPSEDFEQS CQNIRSLTAG NNPFCQCTCEL RDFVKNIGWV AREVVEGWPD SYRCDYPESS
 RGTALRDFHM SPLSCDT

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Mouse Tlr1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
 - State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	TLR1
Alternative Name:	Tlr1 (TLR1 Products)
Background:	Participates in the innate immune response to microbial agents. Specifically recognizes diacylated and triacylated lipopeptides. Cooperates with TLR2 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. Forms the activation cluster TLR2:TLR1:CD14 in response to triacylated lipopeptides, this cluster triggers signaling from the cell surface and subsequently is targeted to the Golgi in a lipid-raft dependent pathway. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (By similarity). Acts as a coreceptor for M.tuberculosis lipoproteins LprG, LpqH and PhoS1 (pstS1), in conjunction with TLR2 and for some but not all lipoproteins CD14 and/or CD36. The lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed:19362712). {ECO:0000250 UniProtKB:Q15399, ECO:0000269 PubMed:19362712}.
Molecular Weight:	63.8 kDa Including tag.
UniProt:	Q9EPQ1
Pathways:	TLR Signaling , Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Toll-Like Receptors Cascades

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)