Datasheet for ABIN4886401

MYD88 Protein (AA 148-296)

Go to Product page

Overview

Quantity:	2 mg
Target:	MYD88
Protein Characteristics:	AA 148-296
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys), Functional Studies (Func)

Product Details

Sequence:	TL DDPLGHMPER FDAFICYCPS DIQFVQEMIR QLEQTNYRLK LCVSDRDVLP GTCVWSIASE LIEKRCRRMV VVVSDDYLQS KECDFQTKFA LSLSPGAHQK RLIPIKYKAM KKEFPSILRF ITVCDYTNPC TKSWFWTRLA KALSLP **Sequence without tag. The location of the tag depends on protein. You may also submit your preference when ordering.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human MYD88 Protein (raised in E. Coli) 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.

Product Details

	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 receival 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 bacterial culture: 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:	Endotoxins have not been removed. Please contact us if you require an endotoxin-free version of this product.
Grade:	Crystallography grade

Target Details

Target:	MYD88
Alternative Name:	MYD88 (MYD88 Products)
Background:	Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response. Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Increases IL-8 transcription. Involved in IL-18-mediated signaling pathway. Activates IRF1 resulting in its rapid migration into the nucleus to mediate an efficient induction of IFN-beta, NOS2/INOS, and IL12A genes.

Target Details

	MyD88-mediated signaling in intestinal epithelial cells is crucial for maintenance of gut homeostasis and controls the expression of the antimicrobial lectin REG3G in the small intestine. {ECO:0000269|PubMed:15361868, ECO:0000269|PubMed:18292575, ECO:0000269|PubMed:19506249, ECO:0000269|PubMed:24316379, ECO:0000269|PubMed:9013863}.
UniProt:	Q99836
Pathways:	NF-kappaB Signaling, TLR Signaling, Neurotrophin Signaling Pathway, 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

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	The protein will be expressed with a N-terminal GST-tag. After a GST purification, the GST tag is cleaved off and the domain is purified by a gel filtration column. Because the GST and the Tir domain probably cannot be separated because of their size, an additionally cation exchange chromatography has to be carried out.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	150 mM NaCL, 20 mM NaH2PO4 pH 7.4, 10 % glycerol. Note: Isoelectric point of protein taken into account regarding pH.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)