Datasheet for ABIN7563471

RIPK2 Protein (AA 1-539) (His tag)

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Overview

Quantity:	1 mg
Target:	RIPK2
Protein Characteristics:	AA 1-539
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RIPK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Ripk2 Protein expressed in mammalien cells.
Sequence:	MNGDAICSAL PPIPYHKLAD LHYLSRGASG TVSSARHADW RVRVAVKHLH IHTPLLDSER NDILREAEIL HKARFSYILP ILGICNEPEF LGIVTEYMPN GSLNELLHRK TEYPDIAWPL RFRILHEIAL GVNYLHNMNP PLLHHDLKTQ NILLDNEFHV KIADFGLSKW RMMSLSQSRS YKSAPEGGTI IYMPPENYEP GQKSRASVKH DIYSYAVIMW EVLSRKQPFE EVTNPLQIMY SVSQGHRPDT SEENLPFDIP HRGLMISLIQ SGWAQNPDER PSFLKCLIEL EPVLRTFEDI TFLEAVIQLK KAKIQSSSST IHLCDKKMDL SLNIPANHPP QEESCGSSLL SRNTGSPGPS RSLSAPQDKG FLSGAPQDCS SLKAHHCPGN HSWDGIVSVP PGAAFCDRRA SSCSLAVISP FLVEKGSERP PIGIAQQWIQ SKREAIVSQM TEACLNQSLD ALLSRDLIMK EDYELISTKP TRTSKVRQLL DTSDIQGEEF AKVVVQKLKD NKQLGLQPYP EVPVLSKAPP SNFPQNKSL **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a**

Product Details

	special request, please contact us.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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 try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	RIPK2
Alternative Name:	Ripk2 (RIPK2 Products)
Background:	Receptor-interacting serine/threonine-protein kinase 2 (EC 2.7.11.1) (Receptor-interacting protein 2) (Tyrosine-protein kinase RIPK2) (EC 2.7.10.2),FUNCTION: Serine/threonine/tyrosine-protein kinase that plays an essential role in modulation of innate and adaptive immune responses (By similarity). Acts as a key effector of NOD1 and NOD2 signaling pathways: upon activation by bacterial peptidoglycans, NOD1 and NOD2 oligomerize and recruit RIPK2 via CARD-CARD domains, leading to the formation of RIPK2 filaments (PubMed:17277144, PubMed:21469090, PubMed:30405132). Once recruited, RIPK2 autophosphorylates and undergoes 'Lys-63'-linked polyubiquitination by E3 ubiquitin ligases XIAP, BIRC2 and BIRC3, as well as 'Met-1'-linked (linear) polyubiquitination by the LUBAC complex, becoming a scaffolding protein for downstream effectors (PubMed:30405132). 'Met-1'-linked polyubiquitin chains attached to RIPK2 recruit IKBKG/NEMO, which undergoes 'Lys-63'-linked polyubiquitination in a RIPK2-dependent process (By similarity). 'Lys-63'-linked polyubiquitin chains attached to RIPK2

Target Details

	serve as docking sites for TAB2 and TAB3 and mediate the recruitment of MAP3K7/TAK1 to IKBKG/NEMO, inducing subsequent activation of IKBKB/IKKB (PubMed:17965022). In turn, NF-kappa-B is released from NF-kappa-B inhibitors and translocates into the nucleus where it activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis (By similarity). The protein kinase activity is dispensable for the NOD1 and NOD2 signaling pathways (By similarity). Contributes to the tyrosine phosphorylation of the guanine exchange factor ARHGEF2 through Src tyrosine kinase leading to NF-kappa-B activation by NOD2 (By similarity). Also involved in adaptive immunity: plays a role during engagement of the T-cell receptor (TCR) in promoting BCL10 phosphorylation and subsequent NF-kappa-B activation (By similarity). Plays a role in the inactivation of RHOA in response to NGFR signaling (PubMed:26646181). {ECO:0000250|UniProtKB:O43353, ECO:0000269|PubMed:17277144, ECO:0000269|PubMed:17965022, ECO:0000269|PubMed:21469090, ECO:0000269|PubMed:26646181, ECO:0000269|PubMed:30405132}.
Molecular Weight:	60.4 kDa
UniProt:	P58801
Pathways:	TCR Signaling, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Positive Regulation of Immune Effector Process, 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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

Handling

Expiry Date:	12 months