Datasheet for ABIN7556031

WIPI2 Protein (AA 1-454) (His tag)

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Overview

Quantity:	1 mg
Target:	WIPI2
Protein Characteristics:	AA 1-454
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This WIPI2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant WIPI2 Protein expressed in mammalian cells.
Sequence:	MNLASQSGEA GAGQLLFANF NQDNTEVKGA SRAAGLGRRA VVWSLAVGSK SGYKFFSLSS VDKLEQIYEC TDTEDVCIVE RLFSSSLVAI VSLKAPRKLK VCHFKKGTEI CNYSYSNTIL AVKLNRQRLI VCLEESLYIH NIRDMKVLHT IRETPPNPAG LCALSINNDN CYLAYPGSAT IGEVQVFDTI NLRAANMIPA HDSPLAALAF DASGTKLATA SEKGTVIRVF SIPEGQKLFE FRRGVKRCVS ICSLAFSMDG MFLSASSNTE TVHIFKLETV KEKPPEEPTT WTGYFGKVLM ASTSYLPSQV TEMFNQGRAF ATVRLPFCGH KNICSLATIQ KIPRLLVGAA DGYLYMYNLD PQEGGECALM KQHRLDGSLE TTNEILDSAS HDCPLVTQTY GAAAGKGTYV PSSPTRLAYT DDLGAVGGAC LEDEASALRL DEDSEHPPMI LRTD **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 special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

Product Details

	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	WIPI2
Alternative Name:	WIPI2 (WIPI2 Products)
Background:	WD repeat domain phosphoinositide-interacting protein 2 (WIPI-2) (WIPI49-like protein 2),FUNCTION: Component of the autophagy machinery that controls the major intracellular degradation process by which cytoplasmic materials are packaged into autophagosomes and delivered to lysosomes for degradation (PubMed:20505359, PubMed:28561066). Involved in an early step of the formation of preautophagosomal structures (PubMed:20505359, PubMed:28561066). Binds and is activated by phosphatidylinositol 3-phosphate (PtdIns3P) forming on membranes of the endoplasmic reticulum upon activation of the upstream ULK1 and PI3 kinases (PubMed:28561066). Mediates ER-isolation membranes contacts by interacting with the ULK1:RB1CC1 complex and PtdIns3P (PubMed:28890335). Once activated, WIPI2 recruits at phagophore assembly sites the ATG12-ATG5-ATG16L1 complex that directly controls the elongation of the nascent autophagosomal membrane (PubMed:20505359, PubMed:28561066). {ECO:0000269|PubMed:20505359, ECO:0000269|PubMed:28561066,

Target Details

	ECO:0000269|PubMed:28890335, ECO:0000269|PubMed:30968111}., FUNCTION: [Isoform 4]: Recruits the ATG12-ATG5-ATG16L1 complex to omegasomes and preautophagosomal structures, resulting in ATG8 family proteins lipidation and starvation-induced autophagy. Isoform 4 is also required for autophagic clearance of pathogenic bacteria. Isoform 4 binds the membrane surrounding Salmonella and recruits the ATG12-5-16L1 complex, initiating LC3 conjugation, autophagosomal membrane formation, and engulfment of Salmonella. {ECO:0000269|PubMed:24954904}.
Molecular Weight:	49.4 kDa
UniProt:	Q9Y4P8

Application Details

Application Notes:	We expect the protein to work for functional studies. 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.
Expiry Date:	12 months