Datasheet for ABIN7564468

LATS1 Protein (AA 1-1129) (His tag)

3 Images

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Overview

Quantity:	1 mg
Target:	LATS1
Protein Characteristics:	AA 1-1129
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LATS1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Lats1 Protein expressed in mammalian cells.
Sequence:	MKRGEKPEGY RQMRPKTFPA SNYPGSSRQM LQEIRESLRN LSKPSDASKA EHNLNKMSTE DPRQVRNPPK FGTHHKALQE IRNSLLPFAN ETSSSRSPSE VNPQMFQDLQ AAGFDEDMVI QALQKTNNRS IEAAVEFISK MSYQDPRREQ MSAAAARPIN ATMKPGNVQH SINRKQSWKG SKESLVPQRH GPSLGENVVY RSESPNSQAD VGRPLSGSGI AAFAQAHPSN GQRVNPPPPP QVRSVTPPPP PRGQTPPPRG TTPPPPSWEP SSQTKRYSGN MEYVISRISP VPPGAWQEGY PPPPLTTSPM NPPSQAQRAI SSVPVGRQPI IMQSTSKFNF TPGRPGVQNG GGQSDFIVHQ NVPTGSVTRQ PPPPYPLTPA NGQSPSALQT GASAAPPSFA NGNVPQSMMV PNRNSHNMEL YNINVPGLQT AWPQSSSAPA QSSPSGGHEI PTWQPNIPVR SNSFNNPLGS RASHSANSQP SATTVTAITP APIQQPVKSM RVLKPELQTA LAPTHPSWMP QPVQTVQPTP FSEGTASSVP VIPPVAEAPS YQGPPPPYPK HLLHQNPSVP PYESVSKPCK DEQPSLPKED DSEKSADSGD SGDKEKKQIT TSPITVRKNK KDEERRESRI QSYSPQAFKF FMEQHVENVL KSHQQRLHRK KQLENEMMRV GLSQDAQDQM RKMLCQKESN YIRLKRAKMD KSMFVKIKTL GIGAFGEVCL

Product Details

	ARKVDTKALY ATKTLRKKDV LLRNQVAHVK AERDILAEAD NEWVVRLYYS FQDKDNLYFV MDYIPGGDMM SLLIRMGIFP ENLARFYIAE LTCAVESVHK MGFIHRDIKP DNILIDRDGH IKLTDFGLCT GFRWTHDSKY YQSGDHPRQD SMDFSNEWGD PSNCRCGDRL KPLERRAARQ HQRCLAHSLV GTPNYIAPEV LLRTGYTQLC DWWSVGVILF EMLVGQPPFL AQTPLETQMK VINWQTSLHI PPQAKLSPEA SDLIIKLCRG PEDRLGKNGA DEIKAHPFFK TIDFSSDLRQ QSASYIPKIT HPTDTSNFDP VDPDKLWSDG SEEENISDTL NGWYKNGKHP EHAFYEFTFR RFFDDNGYPY NYPKPIEYEY IHSQGSEQQS DEDDQHTSSD GNNRDLVYV **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 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:	LATS1
Alternative Name:	Lats1 (LATS1 Products)
Background:	Serine/threonine-protein kinase LATS1 (EC 2.7.11.1) (Large tumor suppressor homolog 1)

Target Details

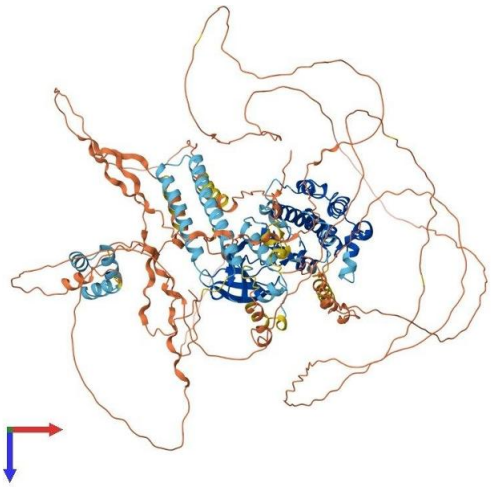
	(WARTS protein kinase),FUNCTION: Negative regulator of YAP1 in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS1 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (PubMed:21145499). Acts as a tumor suppressor which plays a critical role in maintenance of ploidy through its actions in both mitotic progression and the G1 tetraploidy checkpoint. Negatively regulates G2/M transition by down-regulating CDK1 kinase activity. Involved in the control of p53 expression. Affects cytokinesis by regulating actin polymerization through negative modulation of LIMK1. May also play a role in endocrine function. Plays a role in mammary gland epithelial cell differentiation, both through the Hippo signaling pathway and the intracellular estrogen receptor signaling pathway by promoting the degradation of ESR1. {ECO:0000250|UniProtKB:O95835, ECO:0000269|PubMed:21145499, ECO:0000269|PubMed:9988269}.
Molecular Weight:	126.3 kDa
UniProt:	Q8BYR2
Pathways:	Regulation of Actin Filament Polymerization, Maintenance of Protein Location

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

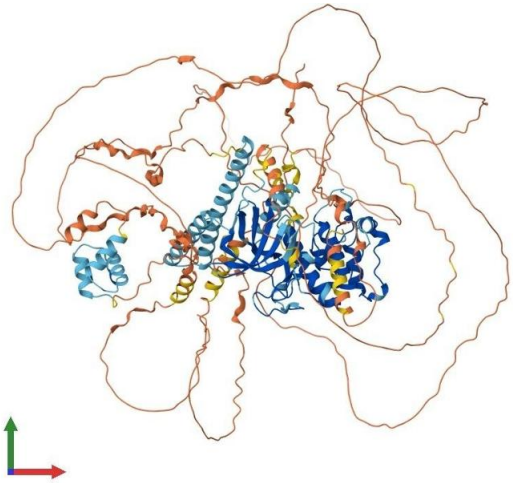
Handling

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



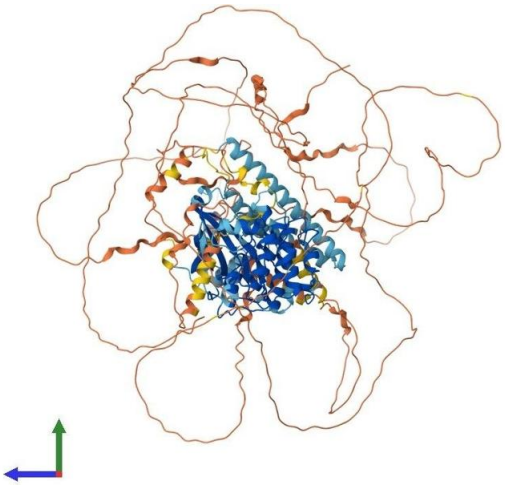
Protein Structure

Image 1. AlphaFold protein structure predicition of Mouse Recombinant Lats1 Protein, UniprotID Q8BYR2



Protein Structure

Image 2. AlphaFold protein structure predicition of Mouse Recombinant Lats1 Protein, UniprotID Q8BYR2



Protein Structure

Image 3. AlphaFold protein structure predicition of Mouse Recombinant Lats1 Protein, UniprotID Q8BYR2

