Datasheet for ABIN7554409

# LATS2 Protein (AA 1-1088) (His tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | LATS2 |
| Protein Characteristics: | AA 1-1088 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This LATS2 protein is labelled with His tag. |

## Product Details

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| Purpose: | Custom-made recombinant LATS2 Protein expressed in mammalian cells. |
| Sequence: | MRPKTFPATT YSGNSRQRLQ EIREGLKQPS KSSVQGLPAG PNSDTSLDAK VLGSKDATRQ QQQMRATPKF GPYQKALREI RYSLLPFANE SGTSAAAEVN RQMLQELVNA GCDQEMAGRA LKQTGSRSIE AALEYISKMG YLDPRNEQIV RVIKQTSPGK GLMPTPVTRR PSFEGTGDSF ASYHQLSGTP YEGPSFGADG PTALEEMPRP YVDYLFPGVG PHGPGHQHQH PPKGYGASVE AAGAHFPLQG AHYGRPHLLV PGEPLGYGVQ RSPSFQSKTP PETGGYASLP TKGQGGPPGA GLAFPPPAAG LYVPHPHHKQ AGPAAHQLHV LGSRSQVFAS DSPPQSLLTP SRNSLNVDLY ELGSTSVQQW PAATLARRDS LQKPGLEAPP RAHVAFRPDC PVPSRTNSFN SHQPRPGPPG KAEPSLPAPN TVTAVTAAHI LHPVKSVRVL RPEPQTAVGP SHPAWVPAPA PAPAPAPAPA AEGLDAKEEH ALALGGAGAF PLDVEYGGPD RRCPPPPYPK HLLLRSKSEQ YDLDSLCAGM EQSLRAGPNE PEGGDKSRKS AKGDKGGKDK KQIQTSPVPV RKNSRDEEKR ESRIKSYSPY AFKFFMEQHV ENVIKTYQQK VNRRLQLEQE MAKAGLCEAE QEQMRKILYQ KESNYNRLKR AKMDKSMFVK IKTLGIGAFG EVCLACKVDT HALYAMKTLR KKDVLNRNQV AHVKAERDIL |

## Product Details

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| | AEADNEWVVK LYYSFQDKDS LYFVMDYIPG GDMMSLLIRM EVFPEHLARF YIAELTLAIE SVHKMGFIHR DIKPDNILID LDGHIKLTDF GLCTGFRWTH NSKYYQKGSH VRQDSMEPSD LWDDVSNCRC GDRLKTLEQR ARKQHQRCLA HSLVGTPNYI APEVLLRKGY TQLCDWWSVG VILFEMLVGQ PPFLAPTPTE TQLKVINWEN TLHIPAQVKL SPEARDLITK LCCSADHRLG RNGADDLKAH PFFSAIDFSS DIRKQPAPYV PTISHPMDTS NFDPVDEESP WNDASEGSTK AWDTLTSPNN KHPEHAFYEF TFRRFFDDNG YPFRCPKPSG AEASQAESSD LESSDLVDQT EGCQPVYV **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:<br>• Made to order protein - from design to production - by highly experienced protein experts.<br>• Protein expressed in mammalian cells and purified in one-step affinity chromatography<br>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>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.<br><br>If you are not interested in a full length protein, please contact us for individual protein fragments.<br><br>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

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| Target: | LATS2 |
| Alternative Name: | LATS2 (LATS2 Products) |
| Background: | Serine/threonine-protein kinase LATS2 (EC 2.7.11.1) (Kinase phosphorylated during mitosis protein) (Large tumor suppressor homolog 2) (Serine/threonine-protein kinase kpm) (Warts-like |

## Target Details

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| | 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 LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Acts as a tumor suppressor which plays a critical role in centrosome duplication, maintenance of mitotic fidelity and genomic stability. Negatively regulates G1/S transition by down-regulating cyclin E/CDK2 kinase activity. Negative regulator of the androgen receptor. Phosphorylates SNAI1 in the nucleus leading to its nuclear retention and stabilization, which enhances its epithelial-mesenchymal transition and tumor cell invasion/migration activities. This tumor-promoting activity is independent of its effects upon YAP1 or WWTR1/TAZ. {ECO:0000269\|PubMed:10871863, ECO:0000269\|PubMed:12853976, ECO:0000269\|PubMed:15131260, ECO:0000269\|PubMed:18158288, ECO:0000269\|PubMed:21952048}. |
| Molecular Weight: | 120.1 kDa |
| UniProt: | Q9NRM7 |

## Application Details

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| 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

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| 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 |