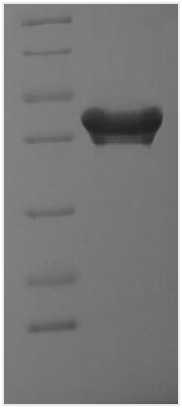
MOB Kinase Activator 1a (MOB1A) Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	MOB kinase activator 1A (MOB1A), Recombinant Protein
Full Product Name	Recombinant Human MOB kinase activator 1A
Product Gene Name	MOB1A recombinant protein
Product Synonym Names	Mob1 alpha; Mob1A; Mob1 homolog 1; BMps one binder kinase activator-like 1B
Sequence	SFLFSSRSSK TFKPKKNIPE GSHQYELLKH AEATLGSGNL RQAVMLPEGE DLNEWIAVNT VDFFNQINML YGTITEFCTE ASCPVMSAGP RYEYHWADGT NIKKPIKCSA PKYIDYLMTW VQDQLDDETL FPSKIGVPFP KNFMSVAKTI LKRLFRVYAH IYHQHFDSVM QLQEEAHLNT SFKHFIFFVQ EFNLIDRREL APLQELIEKL GSKDR
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.
Molecular Weight	40.9 kDa
Sequence Positions	2-216aa; Full Length
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
OMIM	609281
3D Structure	ModBase 3D Structure for Q9H8S9
Product Categories/Family for MOB1A recombinant protein	Signal Transduction
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for MOB1A recombinant protein	Activator of LATS1/2 in the Hippo signaling pathway which 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 LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Stimulates the kinase activity of STK38 and STK38L. Acts cooperatively with STK3/MST2 to activate STK38.

Product References and Citations for MOB1A recombinant protein	Human MOB1.Kagaya S., Kotani S., Todokoro K.Characterization of the human Mob-1 like proteins.Florindo C.S., Tavares A.A.Complete sequencing and characterization of 21,243 full-length human cDNAs.Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.Nat. 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Cancer 126:2079-2089(2010) N-terminal acetylome analyses and functional insights of the N-terminal acetyltransferase NatB.Van Damme P., Lasa M., Polevoda B., Gazquez C., Elosegui-Artola A., Kim D.S., De Juan-Pardo E., Demeyer K., Hole K., Larrea E., Timmerman E., Prieto J., Arnesen T., Sherman F., Gevaert K., Aldabe R.Proc. Natl. Acad. Sci. U.S.A. 109:12449-12454(2012) Crystal structure of a human Mob1 protein toward understanding Mob-regulated cell cycle pathways.Stavridi E.S., Harris K.G., Huyen Y., Bothos J., Verwoerd P.-M., Stayrook S.E., Pavletich N.P., Jeffrey P.D., Luca F.C.Structure 11:1163-1170(2003)
Other Notes	Small volumes of MOB1A recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MOB1A purchase	MBS1379838 is a recombinant protein targeting MOB1A. Also known as Recombinant Human MOB kinase activator 1A. Host: E Coli or Yeast or Baculovirus or Mammalian Cell.



SDS-PAGE of MOB1A recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MOB1A. It may not necessarily be applicable to this product.

NCBI GI #	148747437
NCBI GeneID	55233
NCBI Accession #	NP_060691.2
UniProt Primary Accession #	Q9H8S9
UniProt Secondary Accession #	Q53S34; Q9H3T5; Q9HAI0; Q9NVE2
UniProt Related Accession #	Q9H8S9
GenBank Nucleotide #	NM_018221.4
NCBI Official Full Name	MOB kinase activator 1A isoform 1
NCBI Official Synonym Full Names	MOB kinase activator 1A
NCBI Official Symbol	MOB1A
NCBI Official Synonym Symbols	MOB1; MATS1; Mob4B; C2orf6; MOBK1B; MOBKL1B
UniProt Protein Name	MOB kinase activator 1A
UniProt Synonym Protein Names	Mob1 alpha; Mob1A; Mob1 homolog 1B; Mps one binder kinase activator-like 1B
Protein Family	MOB kinase activator
UniProt Gene Name	MOB1A
UniProt Synonym Gene Names	C2orf6; MOB4B; MOBK1B; MOBKL1B; Mob1A
UniProt Entry Name	MOB1A_HUMAN
NCBI Protein Information	MOB kinase activator 1A
NCBI Summary for MOB1A	The protein encoded by this gene is a component of the Hippo signaling pathway, which controls organ size and tumor growth by enhancing apoptosis. Loss of the encoded protein results in cell proliferation and cancer formation. The encoded protein is also involved in the control of microtubule stability during cytokinesis. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2015]

UniProt Comments for MOB1A	MOB1A: Activator of LATS1/2 in the Hippo signaling pathway which 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 LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Stimulates the kinase activity of STK38 and STK38L. Acts cooperatively with STK3/MST2 to activate STK38. Binds STK38 and STK38L. Interacts with LATS1 and LATS2. Forms a tripartite complex with STK38 and STK3/MST2. Adrenal gland, bone marrow, brain, placenta, prostate, salivary gland, skeletal muscle, testis, thymus, thyroid gland, heart, spinal cord, fetal brain and fetal liver. Belongs to the MOB1/phocein family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Protein kinase, regulatory subunit Chromosomal Location of Human Ortholog: 2p13.1 Cellular Component: cytosol Molecular Function: metal ion binding; protein binding
Research Articles on MOB1A	**1.** No relationship has been found between the MOBKL1B-NS5A interaction and hepatitis C virus replication.
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