OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC220299

PLEKHM2 (NM_015164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLEKHM2 (NM_015164) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLEKHM2
Synonyms:	SKIP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC220299 representing NM_015164
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCGGGGGAGGTGAAGGACCGGATCCTGGAGAACATCTCGCTGTCGGTGAAGAAGTTGCAGAGCT
ATTTTGCTGCATGTGAGGATGAGATCCCTGCCATCCGGAACCATGACAAGGTCCTACAGCGTCTGTGTGA
GCACCTGGACCACGCCCTGCTGTACGGACTGCAAGACCTCTCCTCTGGCTACTGGGTGCTCGTGGTGCAT
TTTACTCGGAGAGAGGCCATCAAGCAGATCGAGGTGCTGCAGCACGTGGCCACCAACCTGGGGCGCAGCC
GTGCCTGGCTGTACCTGGCCCTCAACGAGAACTCCTTGGAGAGCTACCTGCGGTTGTTCCAGGAGAACCT
GGGCCTGCTGCATAAGTACTACGTCAAGAATGCCCTGGTCTGCAGCCACGATCACCTGACGCTCTTCCTG
ACCTTGGTGTCCGGGCTAGAGTTCATTCGTTTCGAGCTGGATCTGGATGCCCCTTACCTAGACCTGGCCC
CCTACATGCCCGACTACTACAAACCTCAGTACCTGCTGGACTTTGAAGACCGCCTTCCCAGCTCGGTCCA
CGGCTCAGACAGTCTGTCCCTCAACTCTTTCAACTCCGTCACCTCCACCAACCTGGAGTGGGATGACAGT
GCGATTGCCCCATCTAGTGAGGATTATGATTTTGGAGATGTGTTTCCAGCAGTGCCGTCTGTACCCAGCA
CAGACTGGGAAGATGGAGACCTCACAGACACGGTCAGTGGTCCCCGCTCCACAGCCTCCGACCTGACCAG
CAGCAAGGCCTCCACCAGGAGCCCCACCCAGCGCCAGAACCCCTTCAACGAGGAGCCGGCAGAGACTGTG
TCCTCCTCTGACACCACCCCCGTGCACACCACCTCTCAGGAGAAGGAGGAGGCCCAGGCCCTGGACCCGC
CGGATGCCTGCACGGAGCTCGAGGTCATCAGGGTCACCAAGAAGAAGAAAATTGGCAAGAAGAAAAAGAG
CAGATCAGATGAGGAGGCAAGTCCACTCCACCCCGCCTGCAGCCAGAAGAAATGTGCCAAGCAGGGGGAC
GGTGACAGCCGCAACGGCAGCCCAAGCCTTGGGCGGGACTCGCCAGACACTATGCTTGCCTCCCCCCAGG
AGGAGGGAGAGGGGCCGAGCAGCACCACGGAGAGCAGCGAGCGCTCCGAGCCGGGCCTGCTGATCCCTGA
GATGAAGGACACCTCCATGGAGCGCTTGGGGCAGCCCCTGAGCAAGGTTATCGACCAGCTCAACGGGCAG
CTGGACCCCAGCACCTGGTGCTCCCGTGCTGAGCCCCCAGACCAGTCCTTTCGGACCGGCTCTCCCGGGG
ATGCCCCGGAGAGGCCGCCGCTTTGCGACTTTAGTGAGGGGCTTTCAGCCCCAATGGACTTCTACCGCTT
TACCGTCGAGAGTCCAAGCACTGTTACATCAGGTGGCGGCCACCATGACCCTGCAGGGCTTGGCCAACCG

View online »

CTGCATGTTCCTAGTAGCCCTGAGGCTGCTGGCCAAGAAGAAGAGGGAGGAGGAGGAGAGGGACAGACGC
CTCGGCCCCTAGAGGATACCACGAGGGAGGCTCAGGAGCTGGAGGCCCAGCTGTCCCTGGTCAGGGAGGG
GCCTGTGTCTGAGCCAGAGCCTGGGACCCAGGAGGTTCTCTGCCAGCTCAAGCGAGACCAGCCCAGCCCG
TGTCTGAGTAGCGCTGAGGATTCTGGGGTGGATGAGGGACAGGGGAGCCCTTCGGAGATGGTCCATTCCT
CGGAGTTCAGAGTAGACAACAATCACCTGCTCCTGCTCATGATCCACGTGTTCCGAGAAAACGAAGAGCA
GCTGTTCAAAATGATCCGGATGAGCACCGGGCACATGGAGGGCAACCTGCAGCTGCTGTACGTGCTGCTC
ACAGACTGCTATGTCTACCTGCTCCGGAAAGGGGCCACAGAGAAGCCATACCTGGTGGAAGAGGCCGTTT
CTTACAATGAACTTGACTATGTGTCGGTTGGCCTTGACCAGCAGACGGTGAAGCTGGTGTGCACCAACCG
CAGGAAGCAGTTTCTGCTGGACACGGCTGATGTGGCGCTGGCTGAGTTCTTTTTGGCTTCTTTGAAGTCA
GCCATGATCAAAGGCTGTCGAGAACCTCCCTACCCCAGCATCCTGACGGATGCCACCATGGAGAAGCTGG
CACTGGCCAAATTTGTGGCCCAAGAATCGAAGTGTGAGGCATCTGCTGTCACCGTGCGCTTCTACGGCCT
TGTGCACTGGGAGGACCCCACAGACGAGTCCCTGGGCCCCACGCCCTGCCACTGCTCACCCCCCGAGGGC
ACCATCACCAAAGAAGGCATGCTGCACTACAAGGCGGGCACCTCCTACCTGGGCAAGGAACACTGGAAGA
CGTGCTTCGTGGTGCTCAGCAACGGGATCCTCTACCAGTACCCGGACCGCACCGACGTCATCCCTCTGCT
CTCGGTGAACATGGGGGGGGAGCAGTGCGGTGGCTGCCGGAGAGCCAACACCACGGATCGGCCCCACGCC
TTCCAGGTCATTCTCTCCGACCGGCCCTGCCTGGAGCTAAGTGCCGAGAGCGAGGCCGAGATGGCCGAGT
GGATGCAGCATCTCTGCCAGGCTGTGTCCAAAGGGGTCATCCCCCAGGGCGTAGCTCCCAGCCCCTGCAT
ACCCTGCTGCCTGGTCCTCACGGATGACCGCCTCTTTACGTGCCATGAGGATTGCCAGACCAGCTTCTTC
CGCTCTTTGGGCACAGCCAAGCTGGGCGACATCAGCGCCGTCTCCACCGAGCCGGGCAAGGAGTACTGCG
TCTTGGAGTTCTCCCAGGACAGCCAGCAGCTCCTCCCGCCCTGGGTCATCTACCTGAGCTGCACTTCTGA
ACTGGACCGATTGCTGTCTGCACTGAACTCTGGGTGGAAAACCATCTATCAGGTGGACCTCCCCCACACG
GCGATCCAGGAAGCCTCCAACAAGAAGAAATTCGAGGATGCCTTGAGCCTCATCCACAGCGCCTGGCAGC
GGAGCGACAGTCTCTGCCGCGGCCGAGCCTCCCGAGACCCCTGGTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220299 representing NM_015164
Red=Cloning site Green=Tags(s)

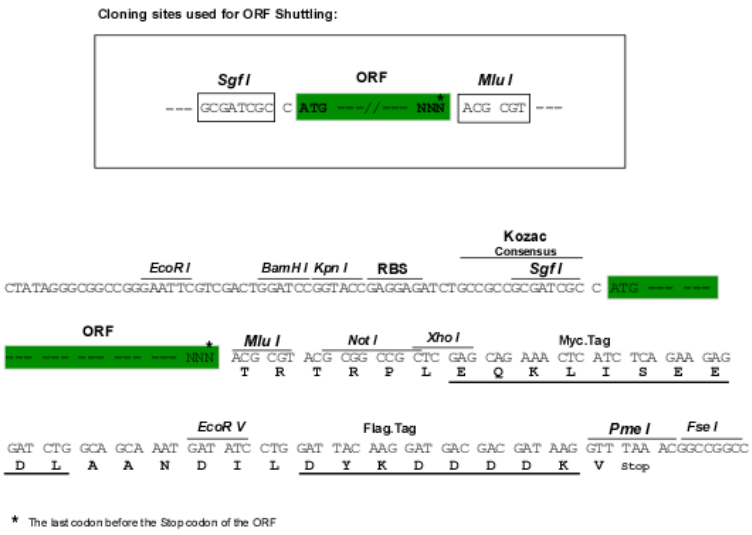
MEPGEVKDRILENISLSVKKLQSYFAACEDEIPAIRNHDKVLQRLCEHLDHALLYGLQDLSSGYWVLVVH
FTRREAIKQIEVLQHVATNLGRSRAWLYLALNENSLESYLRLFQENLGLLHKYYVKNALVCSHDHLTLFL
TLVSGLEFIRFELDLDAPYLDLAPYMPDYYKPQYLLDFEDRLPSSVHGSDSLSLNSFNSVTSTNLEWDDS
AIAPSSEDYDFGDVFPAVPSVPSTDWEDGDLTDTVSGPRSTASDLTSSKASTRSPTQRQNPFNEEPAETV
SSSDTTPVHTTSQEKEEAQALDPPDACTELEVIRVTKKKKIGKKKKSRSDEEASPLHPACSQKKCAKQGD
GDSRNGSPSLGRDSPDTMLASPQEEGEGPSSTTESSERSEPGLLIPEMKDTSMERLGQPLSKVIDQLNGQ
LDPSTWCSRAEPPDQSFRTGSPGDAPERPPLCDFSEGLSAPMDFYRFTVESPSTVTSGGGHHDPAGLGQP
LHVPSSPEAAGQEEEGGGGEGQTPRPLEDTTREAQELEAQLSLVREGPVSEPEPGTQEVLCQLKRDQPSP
CLSSAEDSGVDEGQGSPSEMVHSSEFRVDNNHLLLLMIHVFRENEEQLFKMIRMSTGHMEGNLQLLYVLL
TDCYVYLLRKGATEKPYLVEEAVSYNELDYVSVGLDQQTVKLVCTNRRKQFLLDTADVALAEFFLASLKS
AMIKGCREPPYPSILTDATMEKLALAKFVAQESKCEASAVTVRFYGLVHWEDPTDESLGPTPCHCSPPEG
TITKEGMLHYKAGTSYLGKEHWKTCFVVLSNGILYQYPDRTDVIPLLSVNMGGEQCGGCRRANTTDRPHA
FQVILSDRPCLELSAESEAEMAEWMQHLCQAVSKGVIPQGVAPSPCIPCCLVLTDDRLFTCHEDCQTSFF
RSLGTAKLGDISAVSTEPGKEYCVLEFSQDSQQLLPPWVIYLSCTSELDRLLSALNSGWKTIYQVDLPHT
AIQEASNKKKFEDALSLIHSAWQRSDSLCRGRASRDPWC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8019_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_015164
ORF Size:	3057 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_015164.4
RefSeq Size:	4231 bp
RefSeq ORF:	3060 bp
Locus ID:	23207

UniProt ID: Q8IWE5

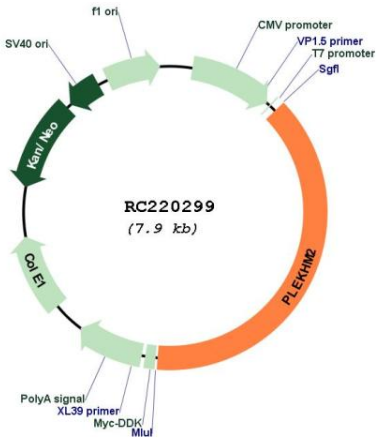
Cytogenetics: 1p36.21

Protein Families: Druggable Genome

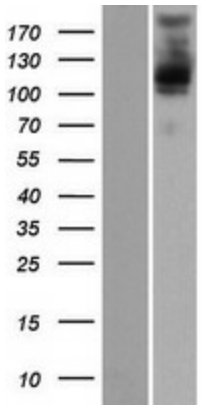
MW: 112.6 kDa

Gene Summary: This gene encodes a protein that binds the plus-end directed microtubule motor protein kinesin, together with the lysosomal GTPase Arl8, and is required for lysosomes to distribute away from the microtubule-organizing center. The encoded protein belongs to the multisubunit BLOC-one-related complex that regulates lysosome positioning. It binds a Salmonella effector protein called Salmonella induced filament A and is a critical host determinant in Salmonella pathogenesis. It has a domain architecture consisting of an N-terminal RPIP8, UNC-14, and NESCA (RUN) domain that binds kinesin-1 as well as the lysosomal GTPase Arl8, and a C-terminal pleckstrin homology domain that binds the Salmonella induced filament A effector protein. Naturally occurring mutations in this gene lead to abnormal localization of lysosomes, impaired autophagy flux and are associated with recessive dilated cardiomyopathy and left ventricular noncompaction. [provided by RefSeq, Feb 2017]

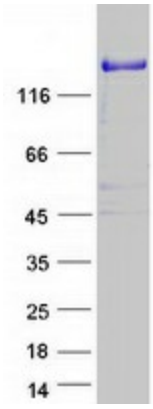
Product images:



Circular map for RC220299



Western blot validation of overexpression lysate (Cat# [LY414756]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220299 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLEKHM2 protein (Cat# [TP320299]). The protein was produced from HEK293T cells transfected with PLEKHM2 cDNA clone (Cat# RC220299) using MegaTran 2.0 (Cat# [TT210002]).