

Product datasheet for MR211592

Plekhm1 (NM_183034) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plekhm1 (NM_183034) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plekhm1
Synonyms:	AP162; B2; BC038943; D330036J23Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211592 representing NM_183034 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGCTCTCAGTGGAGAATGGCCTGGACCCTCGTGTGCCATCCAGGTCATCAAGAAGAAGCTCGTGGGAT
CCGTGAAGGCTCTGCAGAAACAGCATGTGTCTGGACACAGTGGTCACCAAGTGAAGATGGAGATGCCAA
CACCATGTGCAGTGCCCTGGAGGCTGTGTTTCATCCAGGCTGCATGCCAAGCACATCCGCGCCGAGGCT
GGCGGCAAAGGAAGAAGCACACTCACCAGAAGGCTCTGCCTCAGCCTGTCTTCTGGCCCTTCTGAAAG
CCATCACCCACAGACACATTGTCTCAGATTTGGAGCACCTGGTCTTCATCAACACAGATGTAGGCCGTTG
CCGAGCCTGGCTGCGGTTGGCCCTCAATGACGGTCTGATGGAGTGTATCTGAAACTGCTCCTGCAGGAA
CCTGCACGGTTGTGCGAGTACTATCAGCCACAGCCCTGCTTCGAGATGCCGAGGAGGCTGAGTTCCTCC
TGAGCTTCTGCAAGGACTAACATCCTTGTCTTGAAGTCTCCTACAAGTCAAGTCAAGTCAAGTCAAGT
GACTACTACCCCATTTGTCTGCTCTGGGCTTGGCCCTCTGAACTCGACCCTCTCACTACCTCTGGT
GCAGAATAACAGCGAAAGAGTCTCTGGATTCAATTTCCATTCTCGGGCTCTGAGGACATCGAAGTCC
AACACTCAGGCCATAAGATCCGACGAAACAGGAAGCTCACTGCCTTCCCTCAGCCTGGACACAGCCAG
TTCATCCCAGCTGTCTGCAGCCTAAATTTGACAGCTGCCTGCTCAAGAGAATGGTCCCAAGAGTCCA
GACCATTTGAGGAACCCATGTCTATGACTCAGATCTGGGCATGGCAAACACCGATGACCCCGACAGT
CTCTGCAAGAGGTGTTGTCGGAATTCAGCAAAGCCAGGTAATTTCTGCACCAAGCAGCGGACCAACCA
AGAGCCAGACACCCCATGTTCCAGACGCCCTCTCCCTCCATAGCCTAGCTACCAGCACACACCTGCAC
TTTGAGGGATCTGAAGAGCTCTTCTGCCCACAAATCCTCTGGGACATCAAGTGGTGGCCATAAGCATC
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TTCAGACCAGCAGCCTTCTAGTCTGTGGTGGAGCAGCTGGCCAAGGGAGTGGCCCTTGGAAAGGCCCTG
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CTGAAGATGACTTCTGCCGACCTCCCAGGAGCCTGCTCTAAAGAGCGCTGCAGGCTCTGCACATCTCC
TGTGCAAGACACTCCAGAGTCAAGGGCTGCTCTCCAGGGCTTTTTCTCAAGGACCAAGAAAGAGCTGT



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TCCTTGGGGCATTAGACAAAGCATGTGTGCCCTCACAGGCTGTGAAATGCCAGCCAGCTCCAGCCC
 CAGCTCCAGCTCCAGCCCAGCCCCAGCCCCAGCTCCAGGGGTGACACAAGACCATAAACTTCTGTGT
 GGTGCACCGAAGGCAATGGGGCTGTCAAACCCATTCCGGGGCCTCATGAAGCTGGGCACAGTGGCCCG
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 GAGGACTGGCTTGACCGCTACGGGAGGCTCTGCAGAAGGTGCGCCCTCAGCAGGAAGATGAGTGGTGA
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 TCTACTCCCCGAGCCTGCGGGTGCCAGGGCATGCAGTTGGACTGGACATCTGCCAGGTTCCAGAACCA
 GATGCTATCAAAGAGTCCCTTTTGTATCTGTATGCAGACCGGACCTGGTCCCCTATATCTTTTCCCTGT
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 GACCATCCGAGACATCTGCCAGACACCAGCCTTGGGGGCCAGCCTTCTCAAATCATCACGGCCAAG
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 CATCTTTCCCTTTGAGTTTGACACCACAGTCAGGTGTGCTGAATGCAGAAGTGTCTTCCATCAGAGCTGC
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 GT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211592 representing NM_183034
 Red=Cloning site Green=Tags(s)

MLSVENGLDPRAAIQVIKKKLVGSVKALQKQHVSLDVTSEDGDANTMCSALEAVFIHGLHAKHIRAEA
 GGKRRKHTHQKALPQPWFPLLKAITHRHIVSDLEHLVFINTDVGRRCRAWLRALNDGLMECYLKLLQ
 PARLCEYYOPTALLRDAEEAEFLLSFLQGLTSLSFELSYKSAILNEWTLTPLSLSGLCPLSELPLTTS
 AELQRKESLDSISHSSGSEIEVQHSCHKIRNRKLTASSLSLDTASSSQLSCSLNSDCLLQENGPKSP
 DHSEEPMSYSDLGMANTDDPDRSLQEVLSFKAQVNSAPSSGPNQEPDTPMFQTPLSLHSLATSTHLH
 FEGSEELFPAHKSSGTS SGGHKHQLLPQETPDEKQLGTAQAGPAQSTSDQPSSPVGGAAGQSGPWKAL
 EYGRVGPKL VVSSPTSPKGSWISDDFCRPPQEPALKSAAGLCTSPVQDTPESRAALHGPFSQGP
 RKSCLGALDKACVPSQACGNAQPAPAPAPAPAPAPAPAVGVTQDHKNFCVVHRRQMGLSNPFRGLM
 KLTGVARRGAMGIWKEFFCELSPLEFRLYL SDEERTCVESCSLLRCEAVGPAHSDGRFELVFSGK
 KALRASSQDEAEDWLDVRREALQKVRPQQEDEWVNIQYPDQAEAPEAPPDLPYSTLLPEPAGAQM
 QLDWTSAQVPEPDAIKESLLYLADRTWVPYIFSLSLESKCFVRNNEKMLSDSHGVETIRDILPDT
 SLGGPAFFKIITAKAVLKLQAKNTEEATHWRDLVRKVLASYLESAAEAVTLGGSLDEKQEVLFAT
 RENGFLLQYLVAIPTEKGLDSQGCFCAGCSRQIGFSFVRPKLCAFSGLYCDFCHQDDASVIPARI
 IHNWDLTKRPVCRQALKFLAQIRAQPLINLQLVNASLYEHVERMHLIGRSREQLKLLGDYLG
 LCRSGALKELCKRLSHRNYLLESPHRFSVADLQQIAEGVYEGFLKALIEFASQHVYHCDLCTQ
 RGFICQICHHQDIIFPFEDTTVRCAECRTVFHQSCQAVVRKGCPRCARRRKYQE QNVVS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_183034

ORF Size: 3222 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_183034.2](#)

RefSeq Size: 5144 bp

RefSeq ORF: 3225 bp

Locus ID: 353047

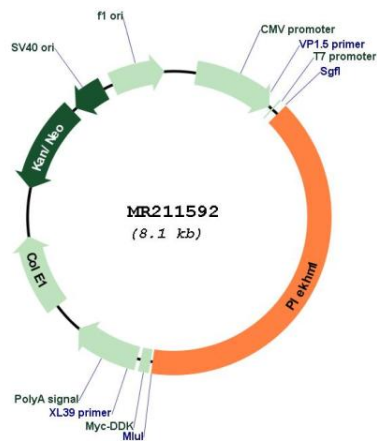
UniProt ID: [Q7TS1](#)

Cytogenetics: 11 E1

MW: 118.5 kDa

Gene Summary: Proposed to act as a multivalent adapter protein that regulates Rab7-dependent and HOPS complex-dependent fusion events in the endolysosomal system and couples autophagic and the endocytic trafficking pathways. Required for late stages of endolysosomal maturation, facilitating both endocytosis-mediated degradation of growth factor receptors and autophagosome clearance. Seems to be involved in the terminal maturation of autophagosomes and to mediate autophagosome-lysosome fusion (PubMed:25498145). Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts (PubMed:27777970). May be involved in negative regulation of endocytic transport from early endosome to late endosome/lysosome implicating its association with Rab7 (By similarity). May have a role in sialyl-lex-mediated transduction of apoptotic signals (By similarity). Involved in bone resorption (PubMed:27777970).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211592