

## Product datasheet for MR206450

### Pafah1b1 (NM\_013625) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pafah1b1 (NM_013625) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pafah1b1
Synonyms:	LIS-1; Lis1; Mdsh; MMS10-U; Ms10u; Pafaha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206450 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGTGTCCAGAGACAACGAGATGAACTAAATCGAGCTATAGCAGATTATCTTCGTTCAAATGGCT  
ATGAAGAGGCATATTCGGTTTTTAAAAAGGAAGCTGAACTAGATATGAATGAAGAATTAGATAAGAAGTA  
TGCTGGTCTTTGGAAAAAATGGACATCTGTTATTAGATTACAAAAAAGGTAATGGAATTAGAATCA  
AACTAAATGAAGCAAAAGAAGAATTTACGTCGGGTGGTCTCTTGGTCAGAAACGGGACCCAAAAGAAT  
GGATCCCGTCCACCTGAGAAATACGCATTGAGTGGTCATAGGAGTCCAGTTACTCGAGTCATTTCCA  
TCCTGTGTTCAAGTGTATGGTCTCTGTTTCAGAGGATGCTACAATTAAGGTGTGGGATTATGAGACTGGA  
GATTTTGAGCGAACTCTCAAGGGCCATACAGACTCTGTACAGGACATTTCTTTGACCACAGTGGCAAGC  
TTCTGGCTTCTGTTTCAGCAGATATGACGATTAATTAATGGGATTTTCAGGGTTTTGAATGCATCAGAAC  
CATGCACGGTCACGATCACAATGTCTTTCAGTAGCCATCATGCCTAATGGAGATCATATAGTGTCTGCC  
TCAAGGGATAAACTATAAAGATGTGGGAAGTGCAAACTGGTACTGTGTGAAGACATTCACAGGACACA  
GAGAATGGGTACGTATGGTGCAGCAAAATCAGGATGGCACTCTGATAGCCAGCTGTTCCAATGACCAGAC  
TGTGCGTGTGGGTTGTAGCAACAAAGGAATGCAAGGCTGAGCTCCGAGAACATGAACATGTGGTGGAA  
TGCAATTCCTGGCTCCAGAAAGTTCATATTCTCCATCTCTGAAGCAACAGGATCTGAGACTAAAAAAA  
GTGGCAAGCCTGGACCTTCTTGCTATCTGGTTCAGAGACAAAATTAAGATGTGGGACGTCAGTAC  
TGGCATGTGCCTTATGACTCTTGTGGGTATGATAAAGTGGTACGTGGAGTTCTGTTCCATTCTGGGGG  
AAGTTTATTTGAGTTGTGCTGATGACAAGACCCTCCGTGTATGGGATTATAAGAACAAGCGATGCATGA  
AGACCCTCAATGCGCATGAACACTTTGTTACCTCCTTGGATTTCCATAAGACGGCACCTATGTGGTTAC  
TGGCAGTGTAGATCAAACAGTAAAGGTGTGGGAGTGCCGT

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR206450 protein sequence  
Red=Cloning site Green=Tags(s)

MVLSQRQRDELNRAIADYLRSNGYEEAYSVFKKEAELDMNEELDKKYAGLLEKKWTSVIRLQKKVMELES  
 KLNEAKEEFTSGGPLGQKRDPKEWIPRPPEKYALSGHRSPVTRVIFHPVFSVMVSASEDATIKVWDYETG  
 DFERTLKGHTDSVQDISFDHSGKLLASCADMTIKLWDFQGFECIRTMHGHDHNVSSVAIMPNGDHIVSA  
 SRDKTIKMWEVQTGYCVKTFTHGREWVRMVRPNQDGLIASCNDQTVRVVVVATKECKAELREHEHVVE  
 CISWAPESSYSSISEATGSETKKSGKPGPFLLSGSRDKTIKMWDVSTGMCLMTLVGHDNWVRGVLFHSGG  
 KFILSCADDKTLRWWDYKNKRCMKTLNAHEHFVTSDFHKTAPYVVTGSVDQTVKWECCR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_013625

**ORF Size:** 1233 bp

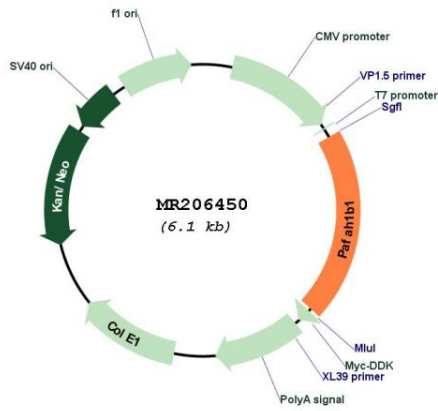
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_013625.4</a>
<b>RefSeq Size:</b>	5540 bp
<b>RefSeq ORF:</b>	1233 bp
<b>Locus ID:</b>	18472
<b>UniProt ID:</b>	<a href="#">P63005</a>
<b>Cytogenetics:</b>	11 45.76 cM
<b>MW:</b>	46.7 kDa
<b>Gene Summary:</b>	Positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus end. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the peripheral transport of microtubule fragments and the coupling of the nucleus and centrosome. Required during brain development for the proliferation of neuronal precursors and the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Neuronal migration involves a process called nucleokinesis, whereby migrating cells extend an anterior process into which the nucleus subsequently translocates. During nucleokinesis dynein at the nuclear surface may translocate the nucleus towards the centrosome by exerting force on centrosomal microtubules. Also required for proper activation of Rho GTPases and actin polymerization at the leading edge of locomoting cerebellar neurons and postmigratory hippocampal neurons in response to calcium influx triggered via NMDA receptors. May also play a role in other forms of cell locomotion including the migration of fibroblasts during wound healing. Non-catalytic subunit of an acetylhydrolase complex which inactivates platelet-activating factor (PAF) by removing the acetyl group at the SN-2 position. Required for dynein recruitment to microtubule plus ends and BICD2-bound cargos (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206450