

Product datasheet for **MR225791**

Epb41 (NM_001128606) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epb41 (NM_001128606) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Epb41
Synonyms:	4.1R; AI415518; D4Ertd442e; Elp-1; Elp1; Epb4.1; mKIAA4056
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR225791 representing NM_001128606
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAACAGAGAAGAGTTTAGCGGCTGAAGCTGAGAATTCTCAGCACCAGCAACAGAAGGAAGAAGGAG
 AGGGAGCCACAACTCAGGCCAACAAAGAACTCAGCTGGAGGAGGCTCCCAAGCGGCCGAGCTGAGGG
 CAGCGATCAGGGTGAGCAGAAGCTGAAAGCATCCAATGGGGACTCCAACACATGAAGACTTGACCAAG
 AACAAAGAACGGACATCAGAAAGCAGAGGCTGTACGACTGCTCTCCTCATTCTCAAAGGCCAAAGT
 CGCAGGTCTCTGAAGAAGAAGGCAGAGAAGTAGAATCAGAGAAAGAGAAAGGTGAAGGGGTGAGAAGGA
 GATAGAACTTGAAACAGCCTTGATGAAGACATCATTTTAAAGGCCCCATTGCAGCTCTGAACCTGAG
 CTCAAACAGACCCATCTTTGGATCTTCATTCTTAAGCAGTATAGAGACACAGCCAGCTCAGGAAGAAC
 ACAGAGAGACCCAGATTCTGAAACGAAGGAAGGAGAAGGGATTGAAGAGTGTCTGGAACAGAGGTGAA
 AGAGGACCCAGAGTCAAGAGCAGAGAGAGAACCCGAAGCTCCCAGAAGCCGCTCAGAAGACACAGAAAC
 ATGCACTGTAAGGTCTCCTTGTGGATGACACGGTCTACGAATGTGTGTAGAGAAACATGCTAAGGGAC
 AAGACTTGCTGAAGCGAGTGTGCGAGCACCTCAACCTTTTGAAGAAGACTACTTTGGTTTAGCCCTGTG
 GGACAGCGCAACCTCTAAGACATGGCTGGATTCTGCCAAAGAAATAAAAAAGCAGGTTCCGAGGTGTTCT
 TGGAAATTCACATTTAATGTGAAGTTTTATCCACCCGACCCAGCACAAATTAACAGAAGACATAACAAGAT
 ACTATTTATGTCTTCAGCTTCGGCAGGACATTGTTGCTGGACGCTGCCCCTGTTCTTTGCAACTTTAGC
 CCTACTCGGGTCTTACACGATCCAGTCTGAGCTGGGAGACTATGACCCAGAAGTGCACGGCATGGATTAT
 GTTAGTGATTTAAACTGGCTCCAAATCAGACCAAGGAAGTTGAAGAAAAGGTCATGGAATTCATAAAT
 CATACAGGTCCATGACTCCAGTCCAGCTGACTGGAATTTCTTGAGAATGCCAAAAAGTTGTCATGTA
 TGGAGTTGATCTTCAAAAGCAAAGGACTTGGAGGGAGTGACATTATTCTCGGGCTCTGCTCCAGCGGC
 CTCTGGTTTACAAGACAAGTTGAGAATTAACCGCTTCTTGGCCCAAAGTGCTAAAGATTTCTTACA
 AACGCAGCAGTTCTTCAAGATCCGGCCTGGAGAGCAAGAACATTATGAAAGTACCATCGGCTTCAA
 GCTCCCCAGTTATCGAGCGGCCAAGAACTATGGAAGGCTGTGTGGAGCATCACACGTTCTCAGACTC
 ACCTCTACAGACACCATCCCCAAAAGCAAGTTTCTTGCCTGGGATCCAAATTCGATACAGTGGCCGGA
 CTCAAGCTCAGACCAGGCAAGCCAGTGCCTGATTGACAGGCTGCTCCACACTTTGAGCGGACAGCAAG
 CAAGCGGGCGTCCAGGAGCTCGATGGAGCAGCAGCTGCTGAGTCCACAGACCGAAGTCTCGGCCACC
 TCTGCCACGCCATTGCTCAGAGTCAGGTACAGAAGGGCCAGGGGCACCTATCAAAAAACACCAAGG
 AAGCTGTGAAGGTTGAAGAGAAGCGGGGAGAAGAGCCGGCTGAGCCCGCTGAGCCGGAGCCACAGAAGC
 ATGGAAGGATTTAGACAAGAGTCAAGAAGAGATCAAAAAGCACCATGCCAGCATCAGTGAAGTGA
 AACTTTATGGAATCGGTACCCGAACACGGCCAGCGAGTGGGACAAGCGCTTATCTACACACTCACCT
 TCCGGACTCTTAACATCAACGGGCAAGTCCCTACTGGAGATGGACCTCCTCTGGTAAAGACTCAAAGT
 CACCATCTCAGATACTGCCAATGCTGTGAAAAGTGAATCCCAACCAAAGATGTCCTATTGTCCACACT
 GAGACCAAGACCATCACCTATGAAGTGCACGACTGAGGACAGCAATGGGGACTTAGACCTGGAGTCT
 TGCTGACAGCCCAGACATCACATCCGAGACCAAGTAGTACAACCACGACACAGATTACCAAGACTGT
 AAAAGGTGGGATTTCTGAGACCCGGATCGAGAAGAGAATTGTGATCACAGGAGATGCCGATATCGACCAT
 GATCAGGTCCTTGTACAAGCCATCAAGGAAGCCAAGGAGCAGCATCCAGACATGTCAGTGACCAAGGTGG
 TCGTCCACCAGGAGACAGAGATCTCTGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225791 representing NM_001128606
 Red=Cloning site Green=Tags(s)

MTTEKSLAAEAENSQHQQQKEEGEGATNSGQQETQLEEASQAAAEGSDQGEQKLKASNGDTPTHEDLTK
 NKERTSESRLSRLSSFLKRPKSQVSEEEGREVESEKEKGEQQKEIELGNSLDEDIILKAPIAAPEPE
 LKTDPSLDLHSLSSIETQPAQEEHREDPDSETKEGEGIEECSGTEVKEDPESRAEREPEASQKPVRRHRN
 MHCKVSLLDLDDTVYECVVEKHAKGQDLLKRVCEHLNLEEDYFGLALWDSATSKTWLDSAKEIKKQVRGVP
 WNFVFNVKFYPPDPAQLTEDITRYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGMDY
 VSDFKLAPNQTKELKVMELHKSYSMTPAQADLEFLENAKKLSMYGVDLHKAKDLEGVDIILGVCSSG
 LLVYKDKLRINRFPWPKVLKISYKRSSFYIKIRPGEQEHYESTIGFKLPSYRAAKLWKVCVEHHTFFRL
 TSTDTIPKSKFLALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRLDGAEEESTDRSPRPT
 SAPAIAQSQVTEGPGAPIKKTPEAVKVEEKRGEEPAEPAEPEPEAWKDLKQSQEEIKKHHASISELKK
 NFMESVPEPRPSEWDKRLSTHSPFRTLNINGVPTGDGPPLVKTQTVTISDTANAVKSEIPTKDVPVHT
 ETKTITYEAAQTEDSNGDLDPGVLTAQTITSETTSSTTTTQITKTVKGGISETRIEKRIVITGDADIDH
 DQVLVQAIKEAKEQHPDMSVTKVVVHQETEISEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_001128606

ORF Size: 2412 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001128606.1](#), [NP_001122078.1](#)

RefSeq Size: 5141 bp

RefSeq ORF: 2415 bp

Locus ID: 269587

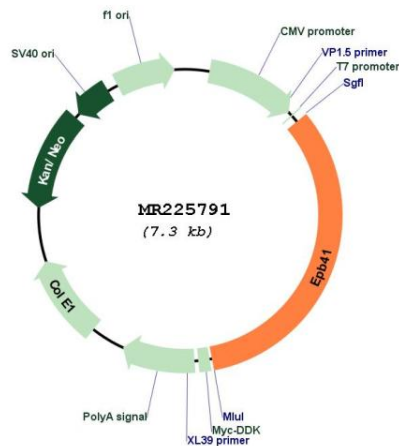
UniProt ID: [P48193](#)

Cytogenetics: 4 64.54 cM

MW: 90.1 kDa

Gene Summary: Protein 4.1 is a major structural element of the erythrocyte membrane skeleton. It plays a key role in regulating membrane physical properties of mechanical stability and deformability by stabilizing spectrin-actin interaction. Recruits DLG1 to membranes. Required for dynein-dynactin complex and NUMA1 recruitment at the mitotic cell cortex during anaphase. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225791