

Product datasheet for **MR210750**

Epb41 (NM_001128607) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epb41 (NM_001128607) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Epb41
Synonyms:	4.1R; AI415518; D4Ertd442e; Elp-1; Elp1; Epb4.1; mKIAA4056
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR210750 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAACAGAGAAGAGTTTAGCGGCTGAAGCTGAGAATTCTCAGCACCAGCAACAGAAGGAAGAAGGAG
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 AACAAAGGAACGGACATCAGAAAGCAGAGGCTGTACGACTGCTCTCCTCATTCTCAAAGGCCAAAGT
 CGCAGGTCTCTGAAGAAGAAGGCAGAGAAGTAGAATCAGAGAAAGAGAAAGGTGAAGGGGTGAGAAGGA
 GATAGAACTTGAAACAGCCTTGATGAAGACATCATTTTAAAGGCCCCATTGCAGCTCTGAACCTGAG
 CTCAAACAGACCCATCTTTGGATCTTCATTCTTAAGCAGTATAGAGACACAGCCAGCTCAGGAAGAAC
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 TCGTCCACCAGGAGACAGAGATCTCTGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>MR210750 protein sequence
 Red=Cloning site Green=Tags(s)

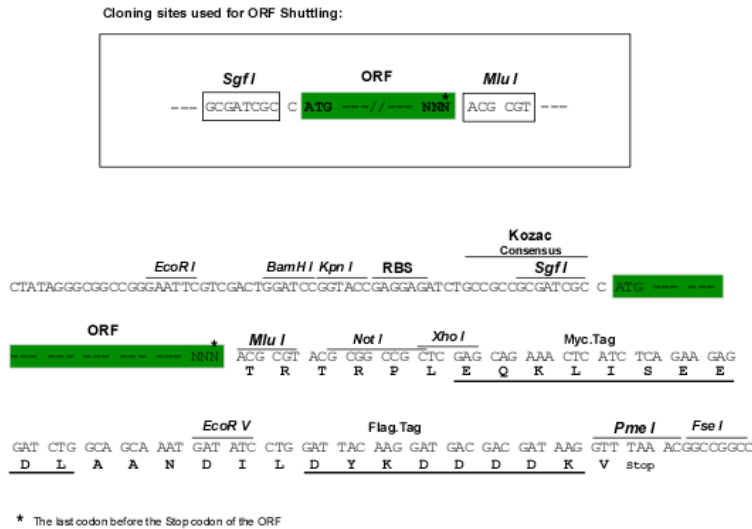
MTTEKSLAAEAENSQHQQQKEEGEGATNSGQQETQLEEASQAAAEGSDQGEQKLKASNGDTPTHEDLTK
 NKERTSESRLSRLSSFLKRPKSQVSEEEGREVESEKEKGEQQKEIELGNSLDEDIILKAPIAAPEPE
 LKTDPSLDLHSLSSIETQPAQEEHREDPSETKEGEGIEECSGTEVKEDPESRAEREPEASQKPVRHRN
 MHCKVSLDDTVYECVVEKHAKGQDLLKRVCEHLNLLLEEDYFGLALWDSATSKTWLDSAKEIKKQVRGVP
 WNFTFNVKFYPPDPAQLTEDITRYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGMDY
 VSDFKLAPNQTKLEEKVMEHKSYSRMTPAQADLEFLENAKKLSMYGVDLHKAKDLEGVDIILGVCSSG
 LLVYKDKLRINRFPWPVKLISYKRSSFIFKIRPGEQEHYESTIGFKLPSYRAAKLWKVCVEHHTFFRL
 TSDTIPKSKFLALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRLDAAAAESTDRSPRT
 SAPAIAQSQVTEGPGAPIKKTPEAVKVEEKRGEEPAEPAEPEPTAWKDLKDSQEEIKKHHASISELKK
 NFMESVPEPRPSEWDKRLSTHSPFRTLNINGQVPTGDGPPLVKTQTVTISDTANAVKSEIPTKDVPVHT
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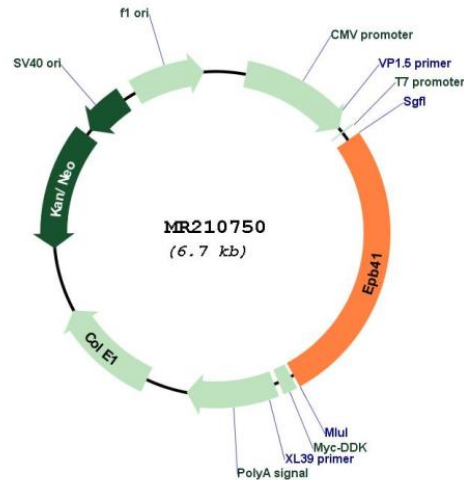
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001128607

ORF Size: 2415 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_001128607.1](#), [NP_001122079.1](#)

RefSeq Size: 5067 bp

RefSeq ORF: 1785 bp

Locus ID: 269587

UniProt ID: [P48193](#)

Cytogenetics: 4 64.54 cM

MW: 89.7 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]