

Product datasheet for **RG212424**

EHM2 (EPB41L4B) (NM_019114) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EHM2 (EPB41L4B) (NM_019114) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EPB41L4B
Synonyms:	CG1; EHM2; LULU2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG212424 representing NM_019114
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGCGCTACGCGGGGCGCGGGGGCGCGGGGCCCGGGCTGGGGGACGAGCGGATGGGGGCCAC
 GGGGGGGCCCGCCGCCCGCCTCCTCCTCGGGCTGCCCGCCGCGCCGGGGGACGCGTTCGCCGC
 GGGCGGGGGCCCTGCTCACCGCGCGCGGGCTGCACATCTCCGCCCGCGCCGCCAAGGCCACC
 CTCTACTGCCGCTTCTCCTGCTCGACGGGACCGAAGTGAGCGTGGACCTGCCGAAACATGCCAAAGGCC
 AGGATTTGTTGATCAGATTGTGTACCCTTGGACCTTGTGAAACAGATTACTTTGGCCTCCAGTTCTT
 CGACTCTGCCAGGTTGCGCACTGGCTGGATCATGCCAAACCCATAAAAAAGCAGATGAAAATTGGACCT
 GCTTATGCTTTACTTTTCGAGTTAAATACTATTCTTCAGAACCAACAACCTTCGTGAGGAGTTTACAA
 GGTACCTGTTTGTAACTCAGGCATGACATTTCTTCTGAAAATTGAAATGCCCTTATGAAACAGC
 TGTGGAATTAGCTGCTCTGTCTACAAGCGGAGCTTGGGGAGTGCAGCTTCCAGAACACACACCAGAG
 CTTGTGTCTGAGTTTCGGTTCATTCCAAATCAGACAGAAGCAATGGAATTTGATATCTCCAGAGATGGA
 AAGAGTGCAGGGAAAGAGCCCTGCCAGGCGGAACCTCCTATCTGAATAAAGCGAAGTGGCTGGAAT
 GTATGGGGTAGACATGCACGTTGTGAGGGGAAGAGATGGCTGTGAATATTCTCTTGGACTGACCCGACA
 GGCATATTAATCTTTGAAGGAGCTAACAAAATAGGCTTATTCTTTGGCCTAAAATTACAAAATGGATT
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 TGTGTTCCGGTTAGACAGTGCAGGACCTGCAACACCTTTGGAAGTGTGCAGTTGAGCACCACGCATTC
 TTCCGACTGCGGACGCCAGGAAACAGCAAATCCAATAGATCCGACTTTATCAGGCTGGCTCTCGCTTCA
 GATTCAGTGGGCGGACAGAATACAAGCTACACATGGCTCCAGGTTACGAAGAACCAGCACTTTGAGAG
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 CAGCTCTGCTCTAAAACAAATCCGGAAGTCCATAATTACCAGCCTCAATATCATCCTAATATCCATCCCA
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 GGACCGGTTGCCTTTTGGCATTGAGGAGAATGGGGGCACACCGTTCCTCACCGCAGCTTCAGGAAGGCAT
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 ACAAAGAGGGGCTCTGAGGTCCCCAACTCCAGCAGCAAGTCCCTTACAAAACAGTCCAGGAACACC
 TGCTTTGTTGAGTGAAGCCGCTGCCATCTAAAGAAGCTGGAAGTGGAACTGTGAAGGCTGCTGGACCC
 TGGCCTCCTCTGCACATCAACATAAACAAGGCTGAAGAAAAGAAAGTCTCGGAGAAAACCTTTCAGACTC
 CACTTTTGCTTCCCCTGTTGCGGATCATGTGAAGTGTAACTTCTGAAAGCCAGTTGGAAAATGCTTC
 CCGAGTGAACATCCAGGGTGGAAAGGAGGAATCACCGTTTGTAATATCAATAAGAAATCCAGTCTTCAG
 GACGCTAGTGAAGAAGTCTATTCTATTCTGTGTGAAACTGCCAGCCAGCTGTGAAAAGCCGGAAA
 TCAAGCCTCCCGAGTGAGGAAGTTAACAAGACAGTATAGTTTTGATGAAGACGACCTCCCTCCAGACCT
 GGCCGAGGCGAGTGGGAGTGACCACATCTACAACCACAAACACCACAACGGCTGCCACACAAGTCTCCGTG
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 CTGGGGCAAGAGCCCTCTGACCGAGGAGGTGCCTTTACCCTGGAGCCGGGTGATCTTCTGATGGATT
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 CTCTCTCCCCATGAAGGAAGAGACCACTGGAGTTTGCATGTACCCTCCAATCAAACAGGCTGATAA
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 CTTTCAGAGACAGTAAATTACAGTGTCTGCTGGCCGACTTCCCCGCTGATCCCAGCAGCGACCCTGAGG
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 AGTGCAGAGACTCCGGCAGGAACTGGAGAGAGAGAAGATGATGAAAAGACTGTTGATGACCAGACTGT
 GAAATTCTCCCCTGTACCTGGAAGATGGCATGGTGCCTCTGTCCATCTTCTTCTCGGGCTTTGTG
 TGCTCACTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG212424 representing NM_019114
 Red=Cloning site Green=Tags(s)

MQRYAGRGGARGRRAGGRARWGPARGPAAAASSSALPAAPGGSVFPAGGGPLL TGGAAVHISAAGAAKAT
 LYCRVFLLDGTEVSVDL PKHAKGQDLFDQIVYHLDLVETDYFGLQFLDSAQVAHWLDHAKPIKKQMKIGP
 AYALHFRVKYYSSEPNLREEFTRYL FVLQLRHDILSGKLCOPYETAVELAALCLQAE LGECELPHTPE
 LVSEFRFIPNQTEAMEFDIFQRWKECRGKSPAQAEL SYLNKAKWLEMYGVD MHVVRGRDGC EYSLGLTPT
 GILIFEGANKIGLFFWPKITKMDFKKSKLTLVVVEDDDQGREQEHFVFR LDSARTCKHLWKC AVEHHAF
 FRLRTPGNSKSNRSDFIRLGSFRFSGRTEYQATHGSRLRRTSTFERKPSKRYPSRRRHSTFKASNPVIAA
 QLCSKTNPEVHNYQPQYHPNIHPSQPRWHPSPNVSYP LSPVLSSDRLPFGEIENG GTPFLTAASGRH
 HHQHQQHQHQHHSNYSLSL TLENKEGLRSPNSSSKSLTKLSPGTPALFSEAAAHLKKLELETVKAAGP
 WPPLHININKAAEEKVSEKLTQTPLLSPVADHVKNILKAQLENASRVNIQGGKEESP FVNINKKSSLQ
 DASVRSP IPIRVETAQPAVEKPEIKPPVRKL TRQYSFDEDDLPPDLAEAVGVT TSTTTNTTAATQVSV
 PLPSPKVQNVSSPHKSEKGLLSPGAKSPDRGGAF TLEPGDLLMDFTEATPLAEPASNP HCAHSRCSPP
 LSLPMKEETTGVCMYPPIKTRLIKTFPVD TMTFPDFTTGPQF TADFRD SKLQCCPGTSP LIPAA TLR
 PLTETVSTVQTIY TTPETCFSGSQCRDTPAGTGEREDDEKTVDDQTVKFSPCHLEDGMVPSVHLLSSGFV
 CSL

TRTRPLE - GFP Tag - V

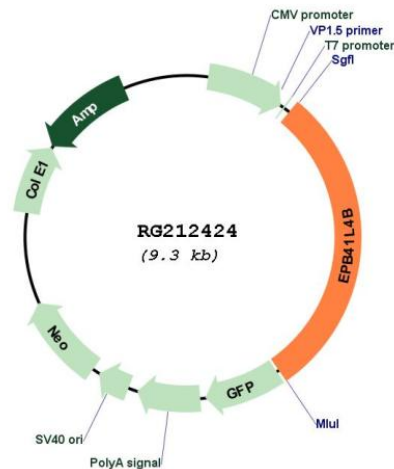
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_019114

ORF Size: 2739 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_019114.2](#), [NP_061987.2](#)

RefSeq Size: 5582 bp

RefSeq ORF: 2703 bp

Locus ID: 54566

UniProt ID: [Q9H329](#)

Cytogenetics: 9q31.3

Domains: B41

Gene Summary: Up-regulates the activity of the Rho guanine nucleotide exchange factor ARHGEF18 (By similarity). Involved in the regulation of the circumferential actomyosin belt in epithelial cells (PubMed:22006950). Promotes cellular adhesion, migration and motility in vitro and may play a role in wound healing (PubMed:23664528). May have a role in mediating cytoskeletal changes associated with steroid-induced cell differentiation (PubMed:14521927). [UniProtKB/Swiss-Prot Function]