

## Product datasheet for **RG229005**

### EPB41 (NM\_001166006) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                         |
| Product Name:             | EPB41 (NM_001166006) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                    |
| Symbol:                   | EPB41                                       |
| Synonyms:                 | 4.1R; EL1; HE                               |
| Mammalian Cell Selection: | Neomycin                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                      |



[View online »](#)

**ORF Nucleotide Sequence:**

>RG229005 representing NM\_001166006  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACAACAGAGAAGAGTTTAGTGACTGAGGCCGAAAATTCACAGCACCAACAGAAGGAAGAGGGTGAGG  
 AAGCCATAAACTCAGGCCAAAGAACCCTCAGCAGGAGGAATCTTGTCAAACAGCAGCTGAAGGAGATAA  
 TTGGTGTGAACAGAAGCTGAAAGCTTCTAATGGAGACTCTACACATGAAGACTTGACCAAGAACAAG  
 GAGCGGACATCAGAAAGCAGAGGACTTTACGACTATTCTCCTCGTTTCTCAAAGGCCAAATCTCAGG  
 TGTCCGAGGAAGAAGGCCAAAGAAGTAGAGTCAGATAAAGAAAAAGGTGAAGGAGGTGAGAAAGAGATAGA  
 ATTTGGAACAGTCTTGATGAAGAGATCATTTTAAAGGCCCAATTGCAGCTCCTGAACCGAACTCAA  
 ACAGACCCATCTTTGGATCTTCATTCAATTAAGCAGTGCAGAAACACAGCCTGCTCAGGAAGAACTCAGAG  
 AAGATCCAGATTTTGAATTAAGGAAGGAGAAGGACTTGAAGAGTGTCCAAAATAGAAGTAAAAGAAGA  
 AAGCCCTCAATCAAAGCAGAAACAGAATTAAGAGCTTCCAAAAACCAATCAGAAAACACAGGAACATG  
 CACTGCAAGGTTTCTTTGTTGGATGACACAGTTTATGAATGTGTTGTGGAGAAACATGCTAAGGGACAAG  
 ATTTGCTTAAACGAGTATGTGAGCATCTCAATCTTTTGAAGAAGACTATTTTGGTCTAGCCATTTGGGA  
 TAACGCAACCTCTAAGACATGGCTGGATTCCGCCAAAGAAATAAAAAAGCAGGTTTCGTGGTGTCCCTTGG  
 AATTTTACATTTAATGTAAGTTTTATCCACCTGACCCAGCACAGTTAACAGAAGACATAACAAGATATT  
 ATTTATGTCTTCAGCTTCGGCAGGACATAGTTGCAGGACGTCTGCCCTGTTTCTTTGCAACCTTAGCATT  
 ATTAGGTTCTTACACCATCCAGTCTGAAGTGGGAGACTACGACCCAGAAGTCCATGGCGTGGATTATGTT  
 AGTGATTTTAACTGGCCCCGAATCAGACCAAGGAAGTGAAGAGAAGGTGATGGAAGTGCATAAGTCAAT  
 ACAGGTCATGACTCCAGCTCAGGCTGACTTGGAGTTTCTTGAGAATGCCAAAAAGTTGTCTATGTATGG  
 AGTTGATCTTCATAAAGCAAAGGACTTGAAGGAGTAGATATCATCCTAGGTGTCTGCTCTAGTGGCCTT  
 CTGGTTTACAAAGATAAGCTGAGAATTAACCGCTTCCCTTGGCCCAAAGTGTGAAGATTTCTTATAAAC  
 GTAGTAGCTTTTTATCAAGATTCGGCCTGGAGAGCAAGAGCAGTATGAAAGTACCATCGGATTCAAACT  
 TCCAGTTACCGAGCAGCTAAGAAATTAAGAAAGTCTGTGTAGAATCAGACGTTTTTTCAGATTGACA  
 TCTACAGACACCATCCCAAAGCAAATTTCTTGCCTAGGATCCAAATTTTCGATACAGTGGCCGGACTC  
 AAGCTCAGACCAGGCAAGCTAGTGTCTAATTGACAGGCTGCCACACTTCGAGCGTACAGCAAGTAA  
 ACGGGCGTCCCGAGCCTCGATGGAGCAGCAGTGTGATTTCGGCAGACCGAAGTCTCGGCCACTTCT  
 GCACCTGCCATTACTCAGGTCAGGTTGCAGAAGGTGGCGTCTAGATGCCTCTGTAAAAAACAGTGG  
 TCCCTAAAGCACAGAAGGAAACAGTGAAGGCTGAAGTGAAGAAAGGAAAGACGAGCCACCTGAGCAAGCTGA  
 GCCAGAGCCACAGAAGCATGGAAGGTGAAAAAACCCACATCGAGGTGACAGTACCCACCTCAAATGGT  
 GACCAAACACAGAAAAAGAGAGAAAGACTAGATGGTGAAGAAATTTATATCAGACATAGCAATTTAATGT  
 TGGAGGATTTAGACAAGAGTCAAGAGGAGATCAAAAAACATCATGCCAGCATCAGTGAGCTGAAAAAGAA  
 CTTTATGGAGTCTGTACCAGAACCACGGCCTAGTGAATGGGATAAACGCTTATCCACTCACTCACCCCTC  
 CGAACTTTAACATCAATGGGCAAATCCACAGGAGAAGGAGTGAAGTACTTTGTCCACA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG229005 representing NM\_001166006  
Red=Cloning site Green=Tags(s)

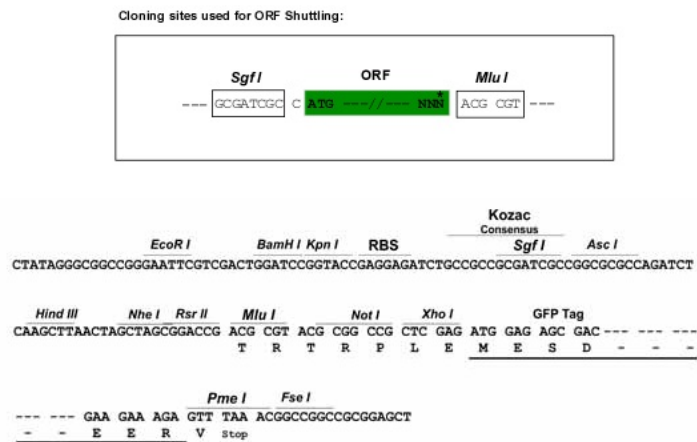
```

MTTEKSLVTEAENSQHQQKEEGEEAINSGQQEPQQEESCQTAAGDNWCEQKLKASNGDTPHEDLTKNK
ERTSESRLSRLFSSFLKRPKSQVSEEEGKEVESDKKEGEGGQKEIEFGTSLDEEIIILKAPIAAPEPELK
TDPSLDLHSLSSAETQPAQEELREDPDFEIKEGEGLEECKSIEVKEESPQSKAETELKASQKPIRKHRNM
HCKVSLLDLDDTVYECVVEKHAKGQDLLKRVCEHLNLLLEEDYFGLAIWDNATSKTWLDSAKEIKKQVRGVPW
NFTFNVKFYPPDPAQLTEDITRYYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDELHGVDYV
SDFKLAPNQTKLEEKVMELHKSYSRMPAQADLEFLENAKKLSMYGVDLHKAKDLEGVDIILGVCSSGL
LVYKDKLRINRFPWPKVLKISYKRSSFFIKIRPGEQEYESTIGFKLPSYRAAKKLWKCVCVEHHTFFRLT
STDTIPKSKFLALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRLDGAADVSDADRSPRPTS
APAITQGQVAEGGVLDAKAKTVVPAQKETVKAIEVKKEDPEPEQAEPEPTAEWKVEKTHIEVTVPTNSG
DQTQKKRERLDGENIYIRHSNLMLEDLDSKQEEIKKHHASISELKNFMESVPEPRPSEWDKRLSTHSPF
RTLNINGQIPTGEGVSTLST
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001166006

**ORF Size:** 2160 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\\_001166006.1](#), [NP\\_001159478.1](#)

**RefSeq Size:** 2423 bp

**RefSeq ORF:** 2163 bp

**Locus ID:** 2035

**UniProt ID:** [P11171](#)

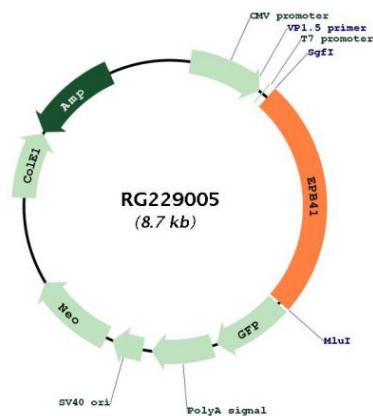
**Cytogenetics:** 1p35.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Tight junction

**Gene Summary:** The protein encoded by this gene, together with spectrin and actin, constitute the red cell membrane cytoskeletal network. This complex plays a critical role in erythrocyte shape and deformability. Mutations in this gene are associated with type 1 elliptocytosis (EL1). Alternatively spliced transcript variants encoding different isoforms have been described for this gene.[provided by RefSeq, Oct 2009]

## Product images:



Circular map for RG229005