

## Product datasheet for **RG212040**

### EPB41 (NM\_004437) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EPB41 (NM_004437) 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)



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**ORF Nucleotide Sequence:**

>RG212040 representing NM\_004437  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCACTGCAAGTTTCTTTGTTGGATGACACAGTTTATGAATGTGTTGGAGAAACATGCTAAGGGAC  
 AAGATTTGCTTAAACGAGTATGTGAGCATCTCAATCTTTTGAAGAAGACTATTTTGGTCTAGCCATTTG  
 GGATAACGCAACCTCTAAGACATGGCTGGATTCCGCCAAAGAAATAAAAAAGCAGTTCTGGTGTCCCT  
 TGGAAATTTACATTTAATGTAAGTTTTATCCACCTGACCCAGCACAGTTAACAGAAGACATAACAAGAT  
 ATTATTTATGTCTTCAGCTTCGGCAGGACATAGTTGCAGGACGTCTGCCCTGTTCCCTTTCGAACCTTAGC  
 ATTATTAGTTCTTACACCATCCAGTCTGAACTGGGAGACTACGACCCAGAACTCCATGGCGTGGATTAT  
 GTTAGTGATTTTAACTGGCCCCGAATCAGACCAAGGAAGTTGAAGAGAAGGTCATGGAAGTGCATAAGT  
 CATACAGTCCATGACTCCAGCTCAGGCTGACTTGGAGTTTCTTGAGAATGCCAAAAAGTTGTCTATGTA  
 TGGAGTTGATCTTCATAAAGCAAAGGACTTGAAGGAGTAGATATCATCCTAGGTGTCTGCTCTAGTGGC  
 CTCTGGTTTACAAAGATAAGCTGAGAATTAACCGCTTCCCTTGGCCCAAAGTGCTGAAGATTTCTTATA  
 AACGTAGTAGCTTTTTCATCAAGATTCGGCTGGAGAGCAAGAGCAGTATGAAAGTACCATCGGATTCAA  
 ACTTCCAGTTACCGAGCAGCTAAGAAATTATGAAAAGTCTGTGTAGAACATCACACGTTTTTCAGATTG  
 ACATCTACAGACACCATTTCCCAAAGCAAATTTCTTGGCTAGGATCCAAATTTTCGATACAGTGGCCGGA  
 CTCAAGCTCAGACCAGGCAAGCTAGTGCTCTAATTGACAGGCCTGCCACACTTCGAGCGTACAGCAAG  
 TAAACGGGCGTCCCGAGCCTCGATGGAGCAGCAGCTGTCGATTCCGCAGACCGAAGTCTCGGCCCACT  
 TCTGCACCTGCCATTACTCAGGTCAGGTTGCAGAAGGTGGCGTCTAGATGCCTCTGCTAAAAAACAG  
 TGGTCCCTAAAGCACAGAAGAAACAGTGAAGGCTGAAGTGAAAAAGGAAGACGAGCCACTGAGCAAGC  
 TGAGCCAGAGCCACAGAAGCATGGAAGAAAAAGAGAGAAAGACTAGATGGTGAACACATTTATATCAGA  
 CATAGCAATTTAATGTTGGAGGATTTAGACAAGAGTCAAGAGGAGATCAAAAAACATCATGCCAGCATCA  
 GTGAGCTGAAAAAGAACTTCATGGAGTCTGTACCAGAACCACGGCCTAGTGAATGGGATAAACGCTTATC  
 CACTCACTCACCTTCCGAACTCTTAACATCAATGGGCAAATCCCACAGGAGAAGGACCTCCCCTGGTG  
 AAGACACAACTGTCACCATCTCAGATAATGCCAATGCTGTGAAAAGTGAATCCCAACCAAGACGTCC  
 CTATTGTCCACTGAGACCAAGACCATCACTTATGAGGCTGCCAGACTGTAAAAGGTGGGATTTTCAGA  
 GACACGTATTGAAAAGAGAATTGTGATCACAGGAGATGCTGATATTGACCATGATCAGGCTCTGTACAA  
 GCCATCAAGGAGCAAAGGAGCAGCACCCAGACATGTGAGTACCAAGGTGGTCTCCACCAGGAGACCG  
 AGATTGCTGATGAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG212040 representing NM\_004437  
 Red=Cloning site Green=Tags(s)

MHCKVSLDDTVYECVVEKHAKGQDLLKRVCEHLNLEEDYFGLAIWDNATSKTWLDSAKEIKKQVRGVP  
 WNFTFNVKFPYPPDPAQLTEDITRYYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGVDY  
 VSDFKLAPNQTKLEEKVMEHKSYSRSMTPAQADLEFLENAKKLSMYGVDLHKAKDLEGVDIILGVCSSG  
 LLVYKDKLRINRFPWPKVLKISYKRSSFFIKIRPGEQEYESTIGFKLPSYRAAKKLWKVCVEHHTFFRL  
 TSTDITPKSKFLALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRSLDAAAVIDSADRSPRPT  
 SAPAITQGQVAEGGVLDAKKTVVPKAQKETVKAQEVKKEDEPPEQAEPEPTEAWKKRERLDGENIYIR  
 HSNLMLEDLKSQEEIKKHHASISELKNFMESVPEPRPSEWDKRLSTHSPFRTLNINGQIPTGEGPPLV  
 KTQTVTISDNANAVKSEIPTKDVPIVHTETKITIYEAQTVKGGISETRIEKRIVITGDADIDHDQVLVQ  
 AIKEAKEQHPDMSVTKVYVHETEIADE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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_004437.4</a>
<b>RefSeq Size:</b>	5823 bp
<b>RefSeq ORF:</b>	1767 bp
<b>Locus ID:</b>	2035
<b>UniProt ID:</b>	<a href="#">P11171</a>
<b>Cytogenetics:</b>	1p35.3
<b>Domains:</b>	B41, SAB
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Tight junction
<b>Gene Summary:</b>	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]