

## Product datasheet for **RG226047**

### Kindlin 2 (FERMT2) (NM\_001135000) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kindlin 2 (FERMT2) (NM_001135000) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kindlin 2
Synonyms:	KIND2; mig-2; MIG2; PLEKHC1; UNC112; UNC112B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG226047 representing NM\_001135000  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCTGGACGGGATAAGGATGCCAGATGGCTGCTACGCGGACGGGACGTGGAACTGAGTGTCCATG  
 TGACGGACCTGAACCGCATGTCAACCTGAGAGTGACCGGCGAGGTGCACATTGGAGGCGTGATGCTTAA  
 GCTGGTGGAGAACTCGATGTAAAAAAGATTGGTCTGACCATGCTCTCTGGTGGAAAAGAAGAGAACT  
 TGGCTTCTGAAGACACATTGGACCTTAGATAAGTATGGTATTCAGGCAGATGCTAAGCTTCAGTTCACCC  
 CTCAGCACAACTGCTCCGCTGCAGCTTCCCAACATGAAGTATGTGAAGGTGAAAGTGAATTTCTCTGA  
 TAGAGTCTTCAAAGCTGTTTCTGACATCTGTAAGACTTTAATATCAGACACCCCGAAGAAGCTTTCTCTC  
 TTAAGAAACCCAGAGATCCAACAAAGAAAAAAGAAGAAGCTAGATGACCAGTCTGAAGATGAGGCAC  
 TTGAATTAGAGGGCCTTATCACTCCTGGATCAGGAAGTATATATTCAAGCCAGGACTGTATAGTAA  
 AACATGACCCCACTTATGATGCTCATGATGGAAGCCCTTGTACCAACTTCTGCTTGGTTTGGTGAC  
 AGTGCTTTGTGAGAAGGCAATCCTGGTATACTTGTCTGTCAGTCAACCAATCACGTACCAGAAATCTTGG  
 CAAAAATGTTCAAGCCTCAAGCTTCTTGATAAAGCAAAAAATCAACCAAGGATGGCTTGATTCCTCAAG  
 ATCTCTCATGGAACAAGATGTGAAGGAAAATGAGGCCTTGTCTGCTCCGATTCAAGTATTACAGCTTTTT  
 GATTTGAATCCAAAGTATGATGCAATCAGAATCAATCAGCTTTACGAGCAGGCCAAATGGGCCATTTCTC  
 TGGAAGAGATTGAATGCACAGAAGAAGAAATGATGATGTTGCAGCCCTGCAGTATCATATCAATAAGCT  
 GTCAATCATGACATCAGAGAATCATTGAACAACAGTGACAAAGAAGTTGATGAAGTTGATGCTGCCCTT  
 TCAGACCTGGAGATTACTCTGGAAGGGGTAAAACGTCAACAATTTGGGTGACATTACTCCATTCCCTG  
 AACTTGTGACTACATTAAGTTTTCAAGCCAAAAAGCTGACTCTGAAAGGTTACAACAATATTGGTG  
 CACCTTCAAAGACACATCCATTTCTTGTATAAGAGCAAAGAAGAAATCCAGTGGCACACCCAGCTCATCAG  
 ATGAACCTCAGGGGATGTGAAGTTACCCAGATGTAAACATTTACGGCCAAAAATTTAACATTAACCTC  
 TGATTCAGTTGCAGAAGGCATGAATGAAATCTGGCTTCTGTTGTGACAATGAAAAACAGTATGCACACTG  
 GATGGCAGCCTGCAGATTAGCCTCAAAGGCAAGACCATGGCGGACAGTCTTACAACCTAGAAGTTCAG  
 AATATTCTTCTTTCTGAAGATGCAGCATTTAAACCCAGATCCTCAGTTAATACCAGAGCAGATCACGA  
 CTGATATAACTCTGAATGTTTGGTGTCTCCCGCTATCTAAAAAAGTATAAGAACAAGCAGCCAGGCTA  
 TATAAGAGATTTGATAACAGCGAGAATCTGGAGGCCATCAGAATGTAGCTCAGATGAGTCTAATTGAA  
 GCCAAGATGAGATTTATTCAAGCTTGGCAGTCACTACCTGAATTTGGCATCACTCACTTATTGCAAGGT  
 TCCAAGGGGGCAAAAAAGAAGAACTTATTGGAATTGCATACAACAGACTGATTCCGGATGGATGCCAGCAC  
 TGGAGATGCAATTAACATGGCGTTTCAGCAACATGAAACAGTGAATGTCAACTGGGAAATCAAATG  
 GTAAACTCA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG226047 representing NM\_001135000  
 Red=Cloning site Green=Tags(s)

MALDGIRMPDGCYADGTWELSVHVTDLNRDVTLRVTGEVHIGGVMLKLVKLDVKKDWSHDHALWWEKKRT  
 WLLKTHWTLDKYGIQADAKLQFTPQHLLRLQLPNMKYVKVKNVNSDRVFKAVSDICKTFNIRHPEELSL  
 LKKPRDPTKTKKKKLLDDQSEDEALELEGLITPGSGSIYSSPGLYSKTMPTDYDAHGSPLSPTSAAWFGD  
 SALSEGNGPILAVSQPITSPEILAKMFKPQALLDKAKINQGWLDSRSLMEQDVKENEALLRFKYYSFF  
 DLNPKYDAIRINQLYEQAKWAILLEEIECTEEEMMFALQYHINKLSIMTSENHLNNSDKEVDEVDAAL  
 SDLEITLEGGKTSITLGDITSPELADYIKVFKPKKLLTKGYKQYWCTFKDTSISICYKSKEESSGTPAHQ  
 MNLRGCEVTPDVNISGQKFNIKLLIPVAEGMNEIWLRCNNEKQYAHWMAACRLASKGKTMADSSYNLEVG  
 NILSFLKMQHLPDPQLIPEQITTDITPECLVSPRYLKKYKNKQPGYIRD LITARILEAHQNVQMSLIE  
 AKMRFIQAWQSLPEFGITHFIARFQGGKKEELIGIAYNRLIRMDASTGDAIKTWRFNMMKQWVNVNWEIKM  
 VNS

**TRTRPLE** – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM\_001135000

ORF Size: 1899 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\\_001135000.2](#)

RefSeq Size: 2161 bp

RefSeq ORF: 1902 bp

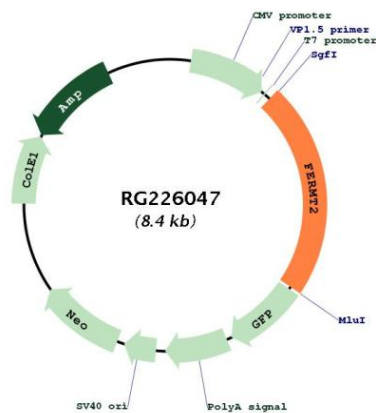
Locus ID: 10979

UniProt ID: [Q96AC1](#)

**Cytogenetics:** 14q22.1

**Gene Summary:** Scaffolding protein that enhances integrin activation mediated by TLN1 and/or TLN2, but activates integrins only weakly by itself. Binds to membranes enriched in phosphoinositides. Enhances integrin-mediated cell adhesion onto the extracellular matrix and cell spreading; this requires both its ability to interact with integrins and with phospholipid membranes. Required for the assembly of focal adhesions. Participates in the connection between extracellular matrix adhesion sites and the actin cytoskeleton and also in the orchestration of actin assembly and cell shape modulation. Recruits FBLIM1 to focal adhesions. Plays a role in the TGFB1 and integrin signaling pathways. Stabilizes active CTNNB1 and plays a role in the regulation of transcription mediated by CTNNB1 and TCF7L2/TCF4 and in Wnt signaling. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG226047