

## Product datasheet for **RC205727**

### Kindlin 2 (FERMT2) (NM\_006832) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kindlin 2 (FERMT2) (NM_006832) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kindlin 2
Synonyms:	KIND2; mig-2; MIG2; PLEKHC1; UNC112; UNC112B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC205727 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCTGGACGGGATAAGGATGCCAGATGGCTGCTACGCGGACGGGACGTGGAACTGAGTGTCCATG  
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 GAGAATCTGGAGGCCATCAGAATGTAGCTCAGATGAGTCTAATTGAAGCCAAGATGAGATTTATTCAA  
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 GCGTTTCAGCAACATGAAACAGTGAATGTCAACTGGGAAATCAAAATGGTCACCGTAGAGTTTGCAGAT  
 GAAGTACGATTGTCTTCATTTGTACTGAAGTAGATTGCAAAGTGGTTTCAATTCATTGGTGGCTACA  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205727 protein sequence  
Red=Cloning site Green=Tags(s)

```
MALDGIRMPDGCYADGTWELSVHVTDLNRDVTLRVTGEVHIGGVMLKLVEKLDVKKDWSHDHALWWEKKRT
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LKKPRDPTKKKKKKLDDQSEDEALELEGPLITPGSGSIYSSPLYSKTMPTPYDAHDGSPLSPTSAAWFGD
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EVRLSFICTEVDCKVHEFIGGYIFLSTRAKDQNESLDEEMFYKLTSGWV
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6574\\_d12.zip](https://cdn.origene.com/chromatograms/mk6574_d12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006832

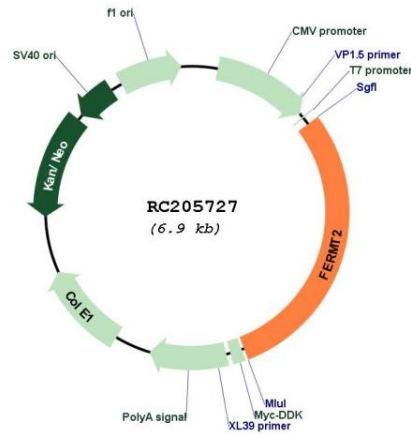
**ORF Size:** 2040 bp

**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](#)

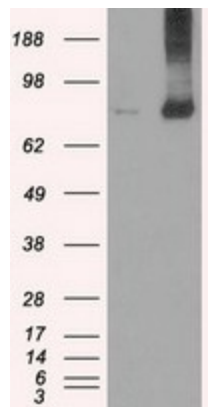
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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>	<u><a href="#">NM_006832.1</a></u> , <u><a href="#">NP_006823.1</a></u>
<b>RefSeq Size:</b>	3351 bp
<b>RefSeq ORF:</b>	2043 bp
<b>Locus ID:</b>	10979
<b>UniProt ID:</b>	<u><a href="#">Q96AC1</a></u>
<b>Cytogenetics:</b>	14q22.1
<b>MW:</b>	77.9 kDa
<b>Gene Summary:</b>	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]

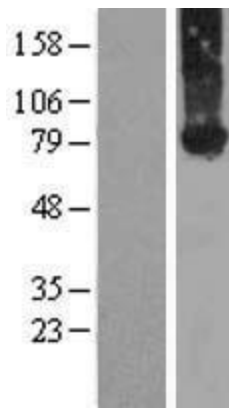
Product images:



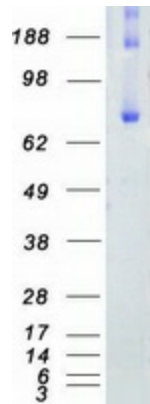
Circular map for RC205727



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FERMT2 (Cat# RC205727, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FERMT2 (Cat# [TA500504]). Positive lysates [LY416377] (100ug) and [LC416377] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416377]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205727 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FERMT2 protein (Cat# [TP305727]). The protein was produced from HEK293T cells transfected with FERMT2 cDNA clone (Cat# RC205727) using MegaTran 2.0 (Cat# [TT210002]).