

## Product datasheet for **RC201544**

### Integrin Linked Kinase (ILK) (NM\_004517) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin Linked Kinase (ILK) (NM_004517) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Integrin Linked Kinase
Synonyms:	HEL-S-28; ILK-1; ILK-2; P59; p59ILK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201544 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGACGACATTTTCACTCAGTGCCGGGAGGGCAACGCAGTCGCCGTTTCGCTGTGGCTGGACAACACGG  
 AGAACGACCTCAACCAGGGGACGATCATGGCTTCTCCCTTGCCTGACTGGCCTGCCGAGAGGGCCGCTC  
 TGCTGTGGTTGAGATGTTGATCATGCGGGGGCACGGATCAATGTAATGAACCGTGGGGATGACACCCCC  
 CTGCATCTGGCAGCCAGTCATGGACACCGTGATATTGTACAGAAGCTATTGCAGTACAAGGCAGACATCA  
 ATGCAGTGAATGAACATGGGAATGTGCCCTGCACTATGCCTGTTTTGGGGCCAAGATCAAGTGGCAGA  
 GGACCTGGTGGCAAATGGGGCCCTTGTGAGCATCTGTAACAAGTATGGAGAGATGCCTGTGGACAAAGCC  
 AAGGCACCCCTGAGAGAGCTTCCGAGAGCGGGCAGAGAAGATGGCCAGAATCTCAACCGTATCCAT  
 ACAAGGACACATTCTGGAAGGGGACCACCCGCACTCGGCCCGAAATGGAACCTGAACAAACACTCTGG  
 CATTGACTTCAAACAGCTTAACTTCTGACGAAGCTCAACGAGAATCACTCTGGAGAGCTATGGAAGGGC  
 CGCTGGCAGGGCAATGACATTGTCGTGAAGGTGCTGAAGGTTTCGAGACTGGAGTACAAGGAAGAGCAGGG  
 ACTTCAATGAAGAGTGTCCCGGCTCAGGATTTTCTCGCATCAAATGTGCTCCCAAGTGCTAGGTGCTG  
 CCACTCTCCACCTGCTCCTCATCTACTCTCATCACACTGGATGCCATATGGATCCCTCTACAATGTA  
 CTACATGAAGGCACCAATTTTCGTCGTGGACCAGAGCCAGGCTGTGAAGTTTGCTTTGGACATGGCAAGGG  
 GCATGGCCTTCTACACACACTAGAGCCCTCATCCACGACATGCACCTCAATAGCCGTAGTGAATGAT  
 TGATGAGGACATGACTGCCCGAATTAGCATGGCTGATGTCAAGTTCTCTTTCAAATGTCTGGTGCATG  
 TATGCACCTGCCTGGGTAGCCCCGAAGCTCTGCAGAAGAAGCCTGAAGACACAAACAGACGCTCAGCAG  
 ACATGTGGAGTTTTGCAGTGCTTCTGTGGGAAGTGGTGACACGGGAGGTACCCTTTGCTGACCTCCAA  
 TATGGAGATTGGAATGAAGGTGGCATTGGAAGGCCTTCGGCCTACCATCCACCAGGTATTTCCCTCAT  
 GTGTGAAGCTCATGAAGATCTGCATGAATGAAGACCCTGCAAAGCGACCCAAATTTGACATGATTGTGC  
 CTATCCTTGAGAAGATGCAGGACAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201544 protein sequence  
 Red=Cloning site Green=Tags(s)

MDDIFTQCREGNAVAVRLWLDNTENDLNQGDHGFSPLHWACREGRSAVVEMLIMRGARINVMNRGDDTP  
 LHLAASHGHRDIVQKLLQYKADINAVNEHGNVPLHYACFWGDQVAEDLVANGALVSI CNKYGEMPVDKA  
 KAPLRELLRERAEMQNLRIPYKDTFWKGTTRTRPRNGTLNKHSGIDFKQLNFLTKLNENHSGELWKG  
 RWQGNDIVVKVLKVRDWSTRKSRDFNEECPRLRIFSHPNVLPVLGACQSPAPHPPTLITHWMPYGSLYNV  
 LHEGTNFVVDQSQAVKFDLDMARGMAFLHTLEPLIPRHALNSRSMIDEDMTARISMADVKFSFQCPGRM  
 YAPAWVAPEALQKPEDTNRRSADMWSFAVLLWELVTREVPFADLSNMEIGMKVALEGLRPTIPPGISPH  
 VCKLMKICMNEDPAKRPKFDMIVPILEKMQDK

**TR**TRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6138\\_g05.zip](https://cdn.origene.com/chromatograms/mk6138_g05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004517

**ORF Size:** 1356 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_004517.4](#)

**RefSeq Size:** 1843 bp

**RefSeq ORF:** 1359 bp

**Locus ID:** 3611

**UniProt ID:** [Q13418](#)

**Cytogenetics:** 11p15.4

**Domains:** pkinase, TyrKc, ANK, S\_TKc

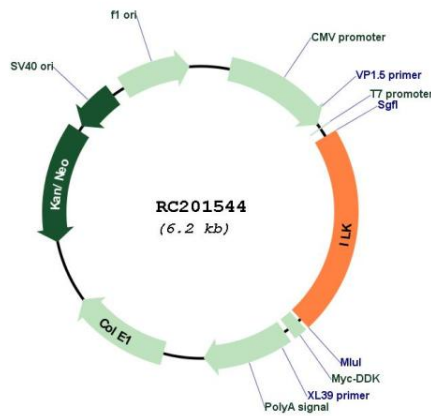
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Endometrial cancer, Focal adhesion, PPAR signaling pathway

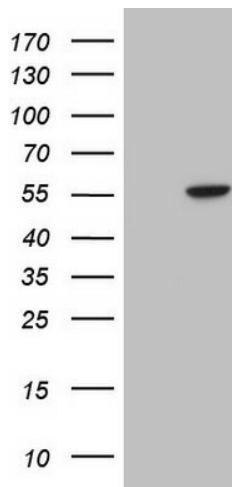
**MW:** 51.4 kDa

**Gene Summary:** This gene encodes a protein with a kinase-like domain and four ankyrin-like repeats. The encoded protein associates at the cell membrane with the cytoplasmic domain of beta integrins, where it regulates integrin-mediated signal transduction. Activity of this protein is important in the epithelial to mesenchymal transition, and over-expression of this gene is implicated in tumor growth and metastasis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]

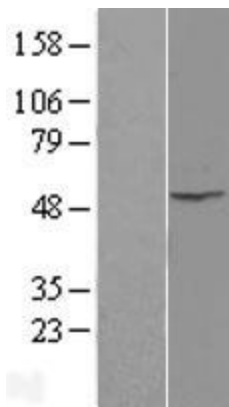
**Product images:**



Circular map for RC201544



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ILK (Cat# RC201544, 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-ILK (Cat# [TA804883]). Positive lysates [LY401438] (100ug) and [LC401438] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY423079]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC220505] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).