

## Product datasheet for RC235300

### ERBIN (NM\_001253699) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERBIN (NM_001253699) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERBIN
Synonyms:	ERBB2IP; HEL-S-78; LAP2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC235300 representing NM_001253699 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGACTACAAAACGAAGTTTGTGGTTCGCGTTGGTACCATGTCGCTGTCTACGAGGGGAAGAGGAGACTG  
TCACTACTTTGATTATTCTCATTGCAGCTTAGAACAAGTCCGAAAGAGATTTTACTTTTGAAAAAC  
CTTGGAGGAAGTCTATTTAGATGCTAATCAGATTGAAGAGCTTCAAAGCAACTTTTAACTGTCAGTCT  
TTACACAAACTGAGTTTGCCAGACAATGATTTAAACAACGTTACCAGCATCCATTGCAAACCTTATTAATC  
TCAGGGAACTGGATGTCAGCAAGAATGGAATACAGGAGTTTCCAGAAAATATAAAAAATTGTAAAGTTTT  
GACAATTGTGGAGGCCAGTGTAAACCCTATTTCCAAGCTCCCTGATGGATTTTCTCAGCTGTAAACCTA  
ACCCAGTTGTATCTGAATGATGCTTTTCTTGAGTTCTTGCCAGCAAATTTGGCAGATTAACCTAACTCC  
AAATATTAGAGCTTAGAGAAAACCAAGTAAAAATGTTGCCTAAAACCTATGAATAGACTGACCCAGCTGGA  
AAGACTGGATTTGGGAAGTAACGAATTCACGGAAGTGCCTGAAGTACTTGAGCAACTAAGTGGATTGAAA  
GAGTTTGGATGGATGCTAATAGACTGACTTTTATCCAGGTTTATTGGTAGTTGAAACAGCTCACAT  
ATTTGGATGTTTCTAAAAATAATTGAAATGGTTGAAGAAGGAATTTCAACATGTGAAAACCTTCAAGA  
CCTCTATTATCAAGCAATTCACCTCAGCAGCTTCTGAGACTATTGGTTCGTTGAAGAATATAACAACG  
CTTAAAAATAGATGAAAACCAAGTAAATGTATCTGCCAGACTCTATAGGAGGGTAAATATCAGTAGAAGAAC  
TGGATTGTAGTTTCAATGAAGTTGAAGCTTTCCTTCTATTGGGAGCTTACTAACTTAAAGAACTTT  
TGCTGCTGATCATAATTACTTACAGCAGTTGCCCCAGAGATTGGAAGCTGGAAAAATATAACTGTGCTG  
TTTCTCCATTCCAATAAACTTGAGACACTTCCAGAGGAAATGGGTGATATGCAAAAATTAAGTGCATTA  
ATTTAAGTGATAATAGATTAAAGAATTTACCCTTAGCTTTACAAAGCTACAGCAATTGACAGCTATGTG  
GCTCTCAGATAATCAGTCCAAACCCTGATACCTTTCAAAAAGAACTGATTCAGAGACCCAGAAAATG  
GTGCTTACCAACTACATGTTCCCTCAACAGCCAAGGACTGAGGATGTTATGTTTATATCAGATAATGAAA  
GTTTTAACCTTCATTGTGGGAGGAACAGAGGAAACAGCGGGCTCAAGTTGCATTGGAATGTGATGAAGA  
CAAAGATGAAAGGGAGGCACCTCCAGGGAGGAAATTTAAAAAGATATCCAACCCATACCCAGATGAG  
CTTAAGAATATGGTCAAACTGTTCAAACCATTGTACATAGATTAAGATGAAGAGACCAATGAAGACT



[View online »](#)

CAGGAAGAGATTTGAAACCACATGAAGATCAACAAGATATAAATAAAGATGTGGGTGTGAAGACCTCAGA  
AAGTACTACTACAGTAAAAAGCAAAGTTGATGAAAAGAGAAAAATATATGATAGGAAACTCTGTACAGAAG  
ATCAGTGAACCTGAAGCTGAGATTAGTCTGGGAGTTTACCAGTGACTGCAAATATGAAAGCCTCTGAGA  
ACTTGAAGCATATTGTTAACCATGATGATGTTTTGAGGAATCTGAAGAACTTTCTTCTGATGAAGAGAT  
GAAAATGGCGGAGATGCGACCACCATTAATTGAAACCTCTATTAACCAGCCAAAAGTCGTAGCACTTAGT  
AATAACAAAAAAGATGATACAAAGGAAACAGATTCTTTATCAGATGAAGTTACACACAATAGCAATCAGA  
ATAACAGCAATTGTTCTTCTCCATCTCGGATGTCTGATTTCAGTTTCTTAACTACTAGTAGTCAAGA  
CACCTCACTCTGCTCTCCAGTGAACAAAACACTCATATTGATATTAATTCCAAAATCAGGCAAGAAGATGAA  
AATTTTAAACAGCCTTTTACAAAATGGAGATATTTTAAACAGTTCAACAGAGGAAAAGTTCAAAGCTCATG  
ATAAAAAAGATTTTAACTTACCTGAATATGATTTGAATGTTGAAGAGCGATTAGTTCTAATTGAGAAAAG  
TGTTGACTCAACAGCCACAGCTGATGACACTCACAAATTAGATCATATCAATATGAATCTTAATAAACTT  
ATAACTAATGATACATTTCAACCAGAGATCATGGAAAGATCAAAAACACAGGATATTGTGCTTGGAAACA  
GCTTTTTAAGCATTAAATCTAAAGAGGAAACTGAGCACTGGAAAATGAAAACAAGTATCCTAATTTGGA  
ATCCGTAATAAGGTAATGGACATTCTGAGGAACTTCCAGTCTCCTAATAGGACTGAACCACATGAC  
AGTGATTGTTCTGTTGACTTAGGATTTTCCAAAAGCACTGAAGATCTCTCCCTCAGAAAAGTGGTCCAG  
TTGGATCTGTTGTGAAATCTCATAGCATAACTAATATGGAGATTGGAGGGCTAAAATCTATGATATTCT  
TAGTGATAATGGACCTCAGCAGCCAAGTACAACCGTTAAAATCACATCTGCTGTTGATGGAAAAATATA  
GTCAGGAGCAAGTCTGCCACACTGTTGTATGATCAACCATTGCAGGTATTTACTGGTTCTTCTCATCTT  
CTGATTTAATATCAGGAACAAAGGCAATTTTCAAGTTTGATTCAAATCATAATCCCGAAGAGCCAAATAT  
AATAAGAGGCCCCACAAGTGGCCCAACTCTGCACCTCAAATATATGGTCTCCACAGTATAATATCCAA  
TACAGTAGCAGTGTGAGTCAAAGACACTTTGTGGCACTCCAACAAAATCCCAATAGACCATGCCA  
GTTTTCTCTCAGCTCCTTCTAGATCAGAGAGCACAGAAAAACAAAGTTATGCTAAACATTCTGCCAA  
TATGAATTTCTAATCATAACAATGTTTCGAGCTAATACTGCATACCATTACATCAGAGACTTGGCCCA  
GCAAGACATGGGAAATGTGGCCATCTACCAAACGACCGACTTATTCTGAGTAACTCGAAGTACAA  
TCCAGCGACAAAGTAGTGTCTCCACAGCCTCTGTAATCTTGGTGTCCAGGCTCTACAAGGCGGGC  
TCAGATTCCTGAAGGAGATTATTTATCATAACAGAGAGTTCCACTCAGCGGGAAGAAGTCTCCAATGATG  
CCAGGATCACAGAGACCCCTTTCTGCACGAACATACAGCATAGATGGTCCAAATGCATCAAGACCTCAGA  
GTGCTCGACCCTCTAATTAATGAAATACCAGAGAGAACTATGTCAGTTAGTGATTTCATTTACCGGAC  
TAGTCCTTCAAAAAGACCAAATGCAAGGGTTGGTTCTGAGCATTCTTTATTAGATCTCCAGGAAAAAGT  
AAAGTTCTCTGACTGGAGAGACAAGTACTTCGACATATTGAAGCCAAAAGTTAGAAAAGAGCATGC  
TGCAAGGTCCTTAATCCAATTTTACTACTGTAAAGCAGTTTTACTGTGGCAGCTCTAGGGATCTGCA  
TGGCAGCCAGGGCAGTCTTGCTTGAGTGTGACAGACAGAAGAGTTCTGGTGGGCACATTTTTCGAATG  
CCTTTGAGTAATGGACAGATGGGCCAGCCTCTCAGGCCTCAGGCAAAATTATAGTCAAATACATCACCCCC  
CTCAGGCATCTGTGGCAAGGCATCCCTCTAGAGAACAACTAATTGATTACTTGTGCTGAAAAGTGGCCCA  
CCAGCCTCCATATACACAGCCCCATTGTTCTCCTAGACAAGGCCATGAAGTGGCAAAAACAAGAGATTCGA  
GTGAGGGTTGAAAAGGATCCAGAAGTGGATTTAGCATATCAGGTGGTGTGCGGGGTAGAGGAAACCCAT  
TCAGACCTGATGATGATGGTATATTTGTAACAAGGTACAACCTGAAGGACCAGCATCAAATTAAGTCA  
GCCAGGTGATAAAATTAATCAGGCTAATGGCTACAGTTTTATAAATATTGAACATGGACAAGCAGTGTCC  
TTGCTAAAAACTTCCAGAATACAGTTGAACCTCATCATTGTACGAGAAGTTTCTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC235300 representing NM\_001253699  
 Red=Cloning site Green=Tags(s)

MTTKRSLFVRLVPCRCLRGEETVTTLDYSHCSLEQVPKEIFFEKTLEELYLDANQIEELPKQLFNCQS  
 LHKLSLPDNDLTLPASIANLINLRELDVSKNGIQEFPENIKNCKVLTIVEASVNPISKLPDGFSQLNL  
 TQLYLNDAFLEFLPANFGRITKLQILELRENQLKMLPKTMNRLTQLERLDLGSNEFTEVPEVLEQLSGLK  
 EFWMDANRLTFIPGFIGSLKQLTYLDVSKNNIEMVEEGISTCENLQDLLSSNSLQQLPETIGSLKNITT  
 LKIDENQLMYLPDSIGGLISVEELDCSFNEVEALPSSIGQLTNLRFTAADHNYLQQLPPEIGSWKNITVL  
 FLHSNKLETLPEEMGDMQKLKVINLSDNRLKNLPSFTKLQQLTAMWLDNQSPLIPLQKETDSETQKM  
 VLTNYMFPQPRTEDVMFISDNESFNPSLWEEQRKQRAQVAFECDEKDEREAPPREGNLKRYPTYPDE  
 LKNMVKTQIVHRLKDEETNEDSGRDLKPHEDQQDINKDVGVTSESTTVKSKVDEREKYMIGNSVQK  
 ISEPEAEISPGSLPVTANMKASENLKHI VNHDDVFESEELSSDEEMKMAEMRPPLIETSI NQPKVVALS  
 NNKDDTKETDLSDEVTHNSNQNSNCS SPSRMSDSVSLNTDSSQDTS LCSPVKQTHIDINSKIRQEDE  
 NFNSLLQNGDILNSSTEEKFAHDKKDFNLPEYDLNVEERLVLIEKSVSTATADDTKLDHINMNLK  
 ITNDTFQPEIMERSKTQDIVLGTSLINSKEETEHLNENKYPNLESVNKVNGHSEETSQSPNRTEPHD  
 SDCSVDLGISKSTEDLSPQKSGPVGVSVKSHSITNMEIGLKIYDILSDNGPQPSTTVKITSAVDGKNI  
 VRKSATLLYDQPLQVFTGSSSSDLSIGTKAIFKFDNSHNPEEPNIIRGPTSGPQSAPQIYGPPQYNIQ  
 YSSAAVKDTLWHSKQNPQIDHASFPPQLLPRSESTENQSYAKHSANMNF SNHNNVRANTAYHLHQRLGP  
 ARHGEMWAISPNDRLIPAVTRSTIQRQSSVSTASVNLGDPGSTRRAQIPEGDYL SYREFHSAGRTPPMM  
 PGSQRPLSARTYSIDGNASRPQSARPSINEIPERTMSVDFNYSRTSPSKRPNARVGEHSLDPPGKS  
 KVPRDWREQVLRHIEAKKLEKSMLSRSFNSNFTTVSSFHCGSSRDLHGSQGLALSVADRRGSGGHI FRM  
 PLSNGQMGOPLRPQANYSQIHPPQASVARHPSREQLIDYLMKVAHQPPYTQPHCSPRQHELAKQEIR  
 VRVEKDPPELGFSSISGGVGGRNPFPRDDGIFVTRVQPEGPASKLLQPGDKIIQANGYSFINIEHGQAVS  
 LLKTFQNTVELIIVREVSS

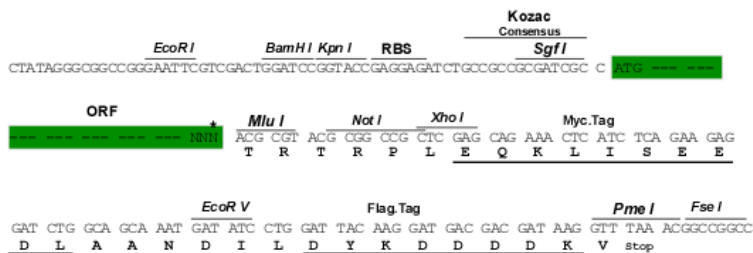
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

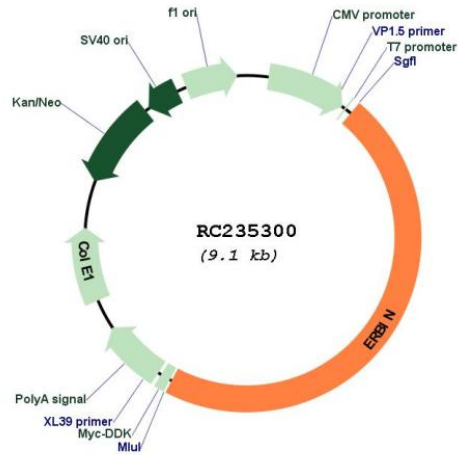
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001253699

**ORF Size:** 4257 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\\_001253699.2](#)

**RefSeq Size:** 7063 bp

**RefSeq ORF:** 4260 bp

**Locus ID:** 55914

**UniProt ID:** [Q96RT1](#)

**Cytogenetics:** 5q12.3

**Protein Families:** Druggable Genome

**Protein Pathways:** NOD-like receptor signaling pathway

**MW:** 159.5 kDa

**Gene Summary:** This gene is a member of the leucine-rich repeat and PDZ domain (LAP) family. The encoded protein contains 17 leucine-rich repeats and one PDZ domain. It binds to the unphosphorylated form of the ERBB2 protein and regulates ERBB2 function and localization. It has also been shown to affect the Ras signaling pathway by disrupting Ras-Raf interaction. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]