

## Product datasheet for **RG223259**

### Cortactin (CTTN) (NM\_005231) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cortactin (CTTN) (NM_005231) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cortactin
Synonyms:	EMS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG223259 representing NM\_005231  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTGAAAGCTTCAGCAGGCCACGCTGTGTCCATCGCCAGGATGACGCGGGGGCCGATGACTGGGAGA  
 CCGACCCGTGATTTGTGAATGATGTGAGTGAGAAGGAGCAAAGATGGGGTGCCAAGACGGTGCAGGGCTC  
 CGGGCACCCAGGAGCATATCAACATACACAAGCTGAGGGAGAATGTCTTTCAAGAGCATCAGACCCCTAAG  
 GAGAAGGAACTTGAAACAGGACAAAAGCTTCCCATGGCTATGGAGGAAATTTGGTGTGGAACAAGACC  
 GAATGGATAAGTCAGCTGTGGCCACGAATATCAGTCGAAACTTTCCAAGCACTGCTCGCAGGTGGACTC  
 GGTCCGTGGCTTCGGAGGCAAGTTTGGTGTCCAGATGGACAGAGTTGATCAGTCTGCTGTAGGCTTTGAA  
 TACCAGGGGAAGACTGAGAAGCATGCCTCCAGAAAGACTACTCCAGTGGTTTTGGCGGCAAGTATGGCG  
 TGCAGGCCGACCGAGTAGACAAGAGCGCGGTGGGCTTCGACTACCAGGGCAAGACGGAGAAGCACGAGTC  
 ACAGAGAGATTACTCAAAGTTTCGGCGGCAAAACGCGTATCGACAAGGACAAAGTGGATAAGAGCGCC  
 GTTGGCTTTGAGTATCAAGGCAAAACGGAGAAGCACGAGTCCCAGAAAGACTATGTGAAAGGGTTTTGGAG  
 GAAAATTTGGTGTGCAGACAGACAGACAAGACAATGTGCCCTTGGCTGGGATCACCAGGAGAAATTTGCA  
 GCTGATGAATCCAAAAAGATTATAAGACTGGTTTTGGAGGCAAATTCGGTGTTCAGTCGGAGAGGCGAG  
 GACTCCGCTGCTGTGGGTTTTGATTACAAGGAGAAGCTGGCCAAGCACGAGTCCCAGCAAGACTACTCCA  
 AAGGATTCGGCGGGAAGTATGGGGTGCAGAAGGATCGGATGGATAAGAATGCGTCAACCTTTGAGGATGT  
 CACCCAGGTGCTCTGCCTACCAGAAGACAGTACCTGTGCAAGCTGTGACCAGCAAAACAAGTAACATC  
 AGAGCTAACTTTGAAAACCTCGCTAAGGAGAAAGAGCAGGAGGACAGGCGGAAGGCGGAGCGGAGAGAG  
 CCCAGCGGATGGCCAAGGAGCGGACAGGAGCAAGGAAGGCGGAGGAGGAGCTGGAGGAGCAAGCCAGAGC  
 CAAAACGCAAAACGCCCCCTGTGTGCGCCCGCACTCAGCCAACCGAGGAGAGGCTGCCCTCGAGCCCGTC  
 TATGAGGATGCGGCTTCTTCAAGGCAGAGCTGAGCTACAGAGGCCCTGTGAGTGGGACGGAGCCGGAGC  
 CCGTGTACAGCATGGAGGCCGCTGACTACCAGAGGGCCAGCAGCCAGCAGGGCCTGGCCTATGCCACAGA  
 GGCTGTCTATGAAAGCGCAGAGGCCCGGGCCACTATCCCGCAGAGGACAGCACCTATGATGAGTACGAG  
 AACGATCTGGGGATCACAGCCGTCGCCCTGTACGACTACCAGGCTGCGGGCGATGATGAGATCTCATTG  
 ACCCTGATGACATCATCACCAACATCGAGATGATTGACGACGGCTGGTGGCGGGGTGTGCAAGGGCCG  
 GTACGGGCTCTTCCAGCCAACATATGTGGAGCTGCGGCAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG223259 representing NM\_005231  
 Red=Cloning site Green=Tags(s)

MWKASAGHAVSIAQDDAGADDWETDPDFVNDVSEKEQRWGAKTVQSGHQEHINIHKLRENVFQEHQTLK  
 EKELETGPKASHGYGGKFGVEQDRMDKSAVGHEYQSKLSKHCSQVDSVRFGGKFGVQMDRVDQSAVGFE  
 YQGKTEKHASQKDYSSGFGGKYGVQADRVDKSAVGFQYQKTEKHESQRDYSKGFGGKYGIDKDKVDKSA  
 VGFEYQGKTEKHESQKDYVKGFGKFGVQTDQRQKCALGWDHQEKLQLHESQKDYKTGFGGKFGVQSERQ  
 DSAAVGFQYKELAKHESQDYSGFGGKYGVQKDRMDKNASTFEDVTQVSSAYQKTPVPEAVTSKTSNI  
 RANFENLAKEKEQEDRRKAEAEARAQMAKERQEAEARRKLEEQARAKTQTPPVSPAPQPTTEERLPSSPV  
 YEDAASFKAELSYRGPVSGTEPEPVYSMEAADYREASSQQGLAYATEAVYESAEAPHYPAEDSTYDEYE  
 NDLGITAVALYDYQAAGDDEISFPDDIITNIEMIDDGWWRGVCKGRYGLFPANYVELRQ

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_005231

**ORF Size:** 1650 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](#)

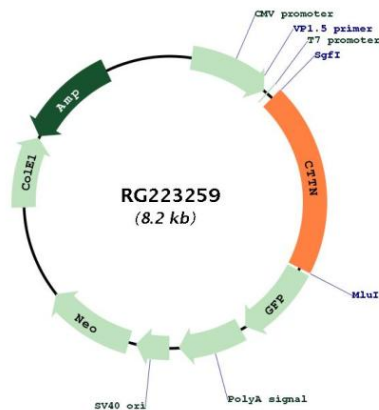
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

RefSeq:	<a href="#">NM_005231.2, NP_005222.2</a>
RefSeq Size:	3243 bp
RefSeq ORF:	1653 bp
Locus ID:	2017
UniProt ID:	<a href="#">Q14247</a>
Cytogenetics:	11q13.3
Domains:	SH3, HS1_rep
Protein Families:	Druggable Genome
Protein Pathways:	Pathogenic Escherichia coli infection, Tight junction
Gene Summary:	This gene is overexpressed in breast cancer and squamous cell carcinomas of the head and neck. The encoded protein is localized in the cytoplasm and in areas of the cell-substratum contacts. This gene has two roles: (1) regulating the interactions between components of adherens-type junctions and (2) organizing the cytoskeleton and cell adhesion structures of epithelia and carcinoma cells. During apoptosis, the encoded protein is degraded in a caspase-dependent manner. The aberrant regulation of this gene contributes to tumor cell invasion and metastasis. Three splice variants that encode different isoforms have been identified for this gene. [provided by RefSeq, May 2010]

### Product images:



Circular map for RG223259