

## Product datasheet for **RC400187**

### E Cadherin (CDH1) (NM\_004360) Human Mutant ORF Clone

#### Product data:

Product Type:	Mutant ORF Clones
Product Name:	E Cadherin (CDH1) (NM_004360) Human Mutant ORF Clone
Mutation Description:	G434fs*
Affected Codon#:	434
Affected NT#:	c.1302_1303
Nucleotide Mutation:	CDH1 Mutant (G434fs*), Myc-DDK-tagged ORF clone of Homo sapiens cadherin 1, type 1, E-cadherin (epithelial) (CDH1) as transfection-ready DNA
Effect:	Frameshift
Symbol:	CDH1
Synonyms:	Arc-1; BCDS1; CD324; CDHE; ECAD; LCAM; UVO
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004360
ORF Size:	1332 bp
Restriction Sites:	Sgfl-Mlul



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**ORF Nucleotide Sequence:**

>RC400187 representing NM\_004360  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCCCTTGGAGCCGACGCTCTCGGCGCTGCTGCTGCTGCAGGTCTCCTTTGGCTCTGCCAGG  
 AGCCGGAGCCCTGCCACCCTGGCTTTGACGCCGAGAGCTACACGTTACGGTGCCCGGCCACCTGGA  
 GAGAGGCCGCGTCTGGGCAGAGTGAATTTGAAGATTGCACCGGTGACAAAAGGACAGCCTATTTTCC  
 CTCGACACCCGATTCAAAGTGGGCACAGATGGTGTATTACAGTCAAAGGCCTCTACGGTTTCATAACC  
 CACAGATCCATTTCTGGTCTACGCCTGGGACTCCACCTACAGAAAGTTTCCACCAAAGTACAGCTGAA  
 TACAGTGGGGCACCACCACCGCCCCCGCCCCATCAGGCCTCCGTTTCTGGAATCCAAGCAGAATTGCTC  
 ACATTTCCAACCTCTCTCTGGCCTCAGAAGACAGAAGAGAGACTGGGTATTCTCTCCATCAGCTGCC  
 CAGAAAATGAAAAGGCCATTTCTAAAAACCTGGTTCAGATCAAATCCAACAAAGACAAGAAGGCAA  
 GGTCTTCTACAGCATCACTGGCCAAGGAGCTGACACACCCCTGTTGGTGTCTTTATTATTGAAAGAGAA  
 ACAGGATGGCTGAAGGTGACAGAGCCTCTGGATAGAGAACGCATTGCCACATACACTCTCTCTCAGC  
 CTGTGTATCCAACGGGAATGCAGTTGAGGATCCAATGGAGATTTTGATCACGGTAACCGATCAGAATGA  
 CAACAAGCCGAATTCACCCAGGAGGTCTTAAAGGGTCTGTCATGGAAGGTGCTCTCCAGGAACCTCT  
 GTGATGGAGGTACAGCCACAGACGCGGACGATGATGTGAACCTACAATGCCGCCATCGTTACACCA  
 TCCTCAGCCAAGATCCTGAGCTCCCTGACAAAAATATGTTCCACCTAACAGGAACACAGGAGTCATCAG  
 TGTGGTCAACTGGGCTGGACCGAGAGAGTTCCCTACGTATACCTGGTGGTTCAAGTGTGACCTT  
 CAAGGTGAGGGTTAAGCACACAGCAACAGCTGTGATCACAGTCACTGACACCAACGATAATCTCCGA  
 TCTTCAATCCCACACGTACAAGGGTCAAGTGCCTGAGAACGAGGCTAACGTCGTAATCACCACACTGAA  
 AGTGACTGATGCTGATGCCCAATACCCACCGTGGGAGGCTGTATACCCATATTGAATGATGATGGT  
 GGACAATTTGTCGTCACCACAAATCCAGTGAACAACGATGGACATTTTAAAAACAGCAAAGGCTTGAT  
 TT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC400187 representing NM\_004360  
 Red=Cloning site Green=Tags(s)

MGPWSRSL SALLLLLQVSSWLCQEPEPCHPGFDAESYFTVPRRHLERGRVLRVNFEDCTGRQRTAYFS  
 LDTRFKVGTGDIIVKRPLRFHNPQIHFLVYAWDSTYRKFSTKVTLNVTGHHHRPPPHQASVSGIAELL  
 TFPNSSPGLRRQKRDWVIPPISCPENEGPFPKNLVQIKSNKDKGKVFYSITGQGADTPPVGVFIERE  
 TGWLKVTPEPLDRERIATYTLFSAVSSNGNAVEDPMEILITVTDQNDNKPEFTQEVFKGSVMEGALPGTS  
 VMEVTADADDDVNTYNAAIAYTILSQPELDPKNMFTINRNTGVISVVTGLDRESFPTYTLVVQAADL  
 QGEGSTTATAVITVTDNDNPPIFNPTTYKQVPEANVVITTLKVTADAPNTPAWEAVYTLNDDG  
 GQFVVTTNPVNDGHFENSKGLGF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**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).

**RefSeq:**

[NP\\_004351](#)

**RefSeq Size:**

4815 bp

**RefSeq ORF:**

2649 bp

**Locus ID:**

999

**Cytogenetics:**

16q22.1

**Domains:**

Cadherin\_C\_term, CA

**Protein Families:**

Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

**Protein Pathways:**

Adherens junction, Bladder cancer, Cell adhesion molecules (CAMs), Endometrial cancer, Melanoma, Pathogenic Escherichia coli infection, Pathways in cancer, Thyroid cancer

**MW:**

49 kDa

**Gene Summary:**

This gene encodes a classical cadherin of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature glycoprotein. This calcium-dependent cell-cell adhesion protein is comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function of this gene is thought to contribute to cancer progression by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization. This gene is present in a gene cluster with other members of the cadherin family on chromosome 16. [provided by RefSeq, Nov 2015]