

Product datasheet for **RC400188**

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:	L436fs*
Affected Codon#:	436
Affected NT#:	c.1306_1307
Nucleotide Mutation:	CDH1 Mutant (L436fs*), 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:	1329 bp
Restriction Sites:	Sgfl-MluI



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ORF Nucleotide Sequence:

>RC400188 representing NM_004360
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGCCCTTGGAGCCGAGCCTCTCGGCGCTGCTGCTGCTGCAGGTCTCCTTTGGCTCTGCCAGG
 AGCCGGAGCCCTGCCACCCTGGCTTTGACGCCGAGAGCTACACGTTACCGGTGCCCGGCCACCTGGA
 GAGAGGCCCGCTCTGGCAGAGTGAATTTGAAGATTGCACCGGTGACAAAAGGACAGCCTATTTTCC
 CTCGACACCCGATTCAAAGTGGGCACAGATGGTGTATTACAGTCAAAGGCCTCTACGGTTTCATAACC
 CACAGATCCATTTCTGGTCTACGCCTGGGACTCCACCTACAGAAAGTTTCCACCAAAGTACAGCTGAA
 TACAGTGGGGCACCACCACCGCCCCCGCCCCATCAGGCCTCCGTTTCTGGAATCCAAGCAGAATTGCTC
 ACATTTCCAACCTCTCTCTGGCCTCAGAAGACAGAAGAGAGACTGGGTATTCTCCATCAGCTGCC
 CAGAAAATGAAAAGGCCATTTCTAAAAACCTGGTTCAGATCAAATCCAACAAAGACAAGAAGGCAA
 GGTCTTCTACAGCATCACTGGCCAAGGAGCTGACACACCCCTGTTGGTGTCTTTATTATTGAAAGAGAA
 ACAGGATGGCTGAAGGTGACAGAGCCTCTGGATAGAGAACGCATTGCCACATACACTCTCTCTCAGC
 CTGTGTATCCAACGGGAATGCAGTTGAGGATCCAATGGAGATTTTGATCACGGTAACCGATCAGAATGA
 CAACAAGCCGAATTCACCCAGGAGGTCTTAAGGGTCTGTGATGGAAGGTGCTCTCCAGGAACCTCT
 GTGATGGAGGTACAGCCACAGACGCGGACGATGATGTGAACCTACAATGCCGCCATCGTTACACCA
 TCCTCAGCCAAGATCTGAGCTCCCTGACAAAAATATGTTACCATTAACAGGAACACAGGAGTCATCAG
 TGTGGTCAACTGGGCTGGACCGAGAGAGTTCCCTACGTATACCCTGGTGGTTCAAGTGTGACCTT
 CAAGGTGAGGGTTAAGCACACAGCAACAGCTGTGATCACAGTCACTGACACCAACGATAATCTCCGA
 TCTTCAATCCCACACGTACAAGGGTCAGGTGCCTGAGAACGAGGTAACGTCGTAATCACCACACTGAA
 AGTGACTGATGCTGATGCCCAATACCCAGCGTGGGAGGCTGTATACACCATATTGAATGATGATGGT
 GGACAATTTGTCGTCACCACAAATCCAGTGAACAACGATGGCATTGAAAACAGCAAAGGGCTTGATTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC400188 representing NM_004360
 Red=Cloning site Green=Tags(s)

MGPWSRSL SALLLLLQVSSWLCQEPEPCHPGFDAESYFTVPRRHLERGRVLGRVNFEDCTGRQRTAYFS
 LDTRFKVGTGDIIVKRPLRFHNPQIHFLVYAWDSTYRKFKSTKVTLNVTGHHHRPPPHQASVSGIAELL
 TFPNSSPGLRRQKRDWVIPPISCPENEGPFPKNLVQIKSNKDKGKVFYSITGQGADTPPVGVFIERE
 TGWLKVTEPLDRERIATYTLFSAVSSNGNAVEDPMEILITVTDQNDNKPEFTQEVFKGSVMEGALPGTS
 VMEVATDADDDVNTYNAAIAYTILSQPELDPKNMFTINRNTGVISVVTGLDRESFPTYTLVVQAADL
 QGEGLSSTATAVITVTDNDNPPIFNPTTYKQVPENEAANVVITLKVTDADAPNTPAWEAVYITLNDGD
 GQFVVTTNPVNDGIENSKGLGF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

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:

48 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]