

Product datasheet for RC400186

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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: L14fs*

Affected Codon#: 14

Affected NT#: c. 41

Nucleotide Mutation: CDH1 Mutant (L14fs*), 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: 162 bp
Restriction Sites: Sgfl-Mlul

ORF Nucleotide >RC400186 representing NM_004360

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGCCCTTGGAGCCGCAGCCTCTCGGCGCTGCTGCTGCCAGGTCTCCTCTTTGGCTCTGCCAGGAGCCGGAGCCCTGCCACCCTGGCTTTGACGCCGAGAGCTACACGTTCACGGTGCCCCGGCGCCACCTGGAG

AGAGGCCGCGTCCTGGGCAGAG

 ${\color{blue} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$

ACAAGGATGACGACGATAAGGTTTAA



E Cadherin (CDH1) (NM_004360) Human Mutant ORF Clone - RC400186

>RC400186 representing NM_004360 **Protein Sequence:**

Red=Cloning site Green=Tags(s)

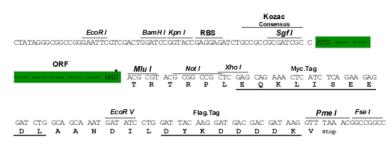
MGPWSRSLSALLLRCRSPLGSARSRSPATLALTPRATRSRCPGATWREAASWAE

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

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).

NP 004351 RefSeq:

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

Adherens junction, Bladder cancer, Cell adhesion molecules (CAMs), Endometrial cancer, **Protein Pathways:**

Melanoma, Pathogenic Escherichia coli infection, Pathways in cancer, Thyroid cancer



ORÏGENE

MW:

5 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]