

Product datasheet for RC400182

OriGene Technologies, Inc.

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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: V82fs*13

Affected Codon#: 80

Affected NT#: c.240_241

Nucleotide Mutation: CDH1 Mutant (V82fs*13), 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: 279 bp
Restriction Sites: Sgfl-Mlul

ORF Nucleotide >RC400182 representing NM_004360

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

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC400182 representing NM_004360

Red=Cloning site Green=Tags(s)

 ${\tt MGPWSRSLSALLLLLQVSSWLCQEPEPCHPGFDAESYTFTVPRRHLERGRVLGRVNFEDCTGRQRTAYFS}$

LDTRFKVGTEVWCDYSQKASTVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ECOR I CTATAGGGGGGGGGGAATTCGTC			BamHIKpnI RB					Kozac Consensus Sgf1 AGATCTGCCGCCGCGCGATCGC C							
ORF	10		llu I G CGT R	ACG	No CGG		_	hol GAG	CAG Q	AA# K		:.Tag : ATG I	C TCF S	A GAA E	GAG E
GAT CTG GCA GCA	A AAT G	EcoR V AT ATC	CTG L	GAT D		Flag.T AAG K	-	GAC D	GAC D	GAT D	AAG K	GTT V	TAA	ACGG	se I

^{*} 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).

 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



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

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

MW: 10 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]