

Product datasheet for **RC205655**

EDEM1 (NM_014674) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	EDEM1
Synonyms:	EDEM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC205655 representing NM_014674
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGCAATGGCGAGCGCTCGTCCTGGGGCTGGTGTCTCTCCGGCTTGGCCTCCATGGAGTATTGTGGCTCG
 TCTTCGGGCTGGGGCCAGCATGGGCTTCTACAGCGCTTTCGCTCAGCTTCGGCTTCCAGCGTCTGAG
 GAGCCCCGACGGCCCCGCGTCGCCACCTCGGGGCCGCTGGGCCGGCTGGGGGGTATCCGGGCCGTCG
 TGGCTGCAGCCGCGGGGACCGGGCAGCGCAGAGCCGCGCAAGGCTCCGCGGCGTCTGGGCCGGGA
 TGTGGGGCCAGCCAACCTGGGGCTACGTCTGGGCGGCCGGGCCGCGGCCGACGAGTACGAGAAGCG
 CTACAGCGGCGCCTTCCCTCCGAGCTGCGTCCCAGATGCGCGACCTGGCACGGGGCATGTTCTCTTT
 GGCTACGACAACATACATGGCTCACGCCTTCCCCAGGACGAGCTCAACCCATCCACTGCCGCGGCCGTG
 GGCCCCACCGGGGACCCTTCAAATCTGAACATCAATGATGTACTAGGGAAGTACTCATTGACTCTTGT
 TGATGCATTGGATACACTTGCAATAATGGGAAATTCATCCGAGTCCAGAAAGCAGTCAAGTTAGTGATC
 AACACAGTTTCATTTGACAAAGATTCCACCGTCCAAGTCTTTGAGGCCACGATAAGGGTCCCTGGGAAGCC
 TCTTTTCTGCTCACAGAATAATAACTGACTCCAAGCAGCCCTTTGGTGACATGACAATTAAGGACTATGA
 TAATGAGTTGTTATACATGGCCCATGACCTGGCGGTGCGGCTCCTCCCTGCTTTTGAAAACCAAGACA
 GGGATTCCATATCCTCGGGTGAATCTAAGACAGGAGTTCCTCCTGACACCAATAATGAGACATGCACAG
 CGGGAGCCGGTTCCTCCTGGTGAATTTGGGATTCTGAGTCGACTCCTGGGGGACTCCACATTTGAGTG
 GGTGGCCAGACGAGCAGTGAAAGCCCTTGAACCTCCGAGCAATGATACAGGATTACTAGGCAATGTC
 GTGAACATTGAGACGGCCACTGGGTTGAAAGCAGAGTGGCCTGGTGCCGGGCTGGACTCCTTCTATG
 AATACCTCTTGAAATCTTACATTCTTTGGAGAAAAAGAACCTAGAAATGTTAATGCTGCATATCA
 GAGTATTCAGAACTACTTAAGAAGAGGGCGGGAAGCCTGCAATGAAGGAGAAGGAGACCCTCCACTCTAT
 GTCAACGTGAACATGTTCAAGTGGCAGCTGATGAACACCTGGATTGACTCTCTGCAGGCCTTTTTCCTG
 GACTGCAGGTGCTGATAGGAGATGTGGAAGATGCCATCTGCCTTCATGCCTTCTACTATGCCATATGGAA
 ACGATATGGTGCCCTCCCTGAGAGATATAACTGGCAGCTGCAGGCCCTGACGTTCTTCTACCCACTG
 AGACCAGAGTTAGTGGAATCCACATATCTCTCTACCAGGCAACCAAGAATCCCTTCTACCTCCATGTAG
 GAATGGATATTCTGCAGAGTCTGAAAAAGTACAAAAAGTCAAGTGTGGGTACGCCACGCTGCATCACGT
 CATTGACAAGTCCACAGAAGACCGGATGGAGAGCTTCTTCTCAGTGAGACCTGTAAATATTTGTATCTG
 CTGTTTGATGAAGACAATCCAGTACACAAGTCTGGAACCAGATACATGTTCAACACAGAGGGACACATTG
 TATCTGTGGATGAGCATCTTCGGGAATTGCCATGGAAGGAATTCTTCTCTGAAGAGGGAGGGCAGGACCA
 AGGGGGAAAGTCTGTGCACAGGCCGAAACCTCATGAGTTAAAAGTCATCAACTCCAGCTCCAACCTGCAAT
 CGTGTACCTGATGAGAGGAGTACTCCCTGCCCTTAAAGAGCATCTACATGCGACAGATTGACCAGATGG
 TTGGTTTGATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205655 representing NM_014674
 Red=Cloning site Green=Tags(s)

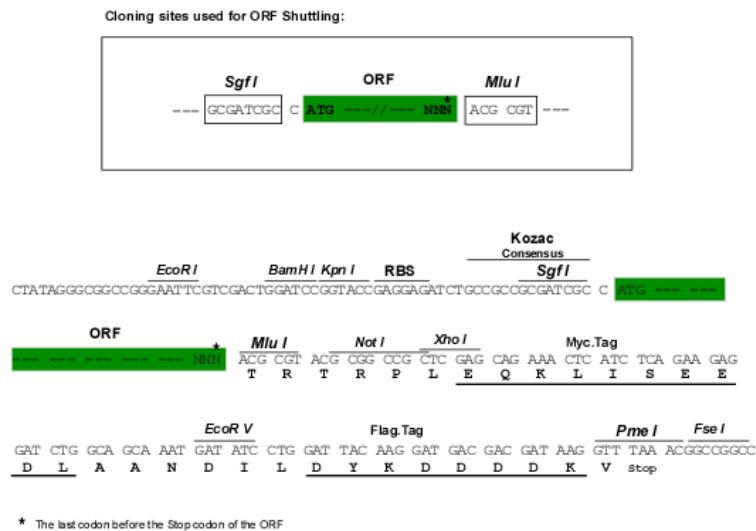
MQWRALVLGLVLLRLGLHGVLWLVFGLGSPMGFYQRFPLSFGFQRLRSPDGPASPTSGPVGRPGGVSGPS
 WLQPPGTGAAQSPRKAPRRPGPGMCGPANWGYVLGGRGRGPDEYEKRYSGAFPPQLRAQMRDLARGMFVF
 GYDNYMAHAFQDELNPIHCRGRGPDGRDPSNLNINDVLGNYSLLVDALDTLAIMGNSSEFQKAVKLV
 NTVSFDKSTVQVFEATIRVLGSLLSAHRITDSKQPFQDMTIKDYDNELLYMAHDLAVRLLPAFENTKT
 GIPYPRVNLKTGVPPDTNNETCTAGAGSLLVEFGILSRLLDGSTFEWVARRAVKALWNLRSNDTGLLGNV
 VNIQTGHWVGKQSGLGAGLDSFYEYLLKSYILFGEKEDLEMFNAAAYQSIQNYLRRGREACNEGEGDPPLY
 VNVNMFSGQLMNTWIDSLQAFFPGLQVLIGDVEDAICLHAFYYAIWKRYGALPERYNWQLQAPDVLFPYPL
 RPELVESTYLLYQATKNPFYLHVGMIDILQSLEKYTKVKCGYATLHHVIDKSTEDRMESFFLSETCKYLYL
 LFDEDPNVHKS TRYMTTEGHIVSDEHLREL PWKEFFSEEGGQDQGGKSVHRPKPHELVINSSSNCN
 RVPDERRYSPLKSIYMRQIDQMVGLI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4263_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014674

ORF Size: 1971 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 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_014674.1](#), [NP_055489.1](#)

RefSeq Size: 6072 bp

RefSeq ORF: 1974 bp

Locus ID: 9695

UniProt ID: [Q92611](#)

Cytogenetics: 3p26.1

Domains: Glyco_hydro_47

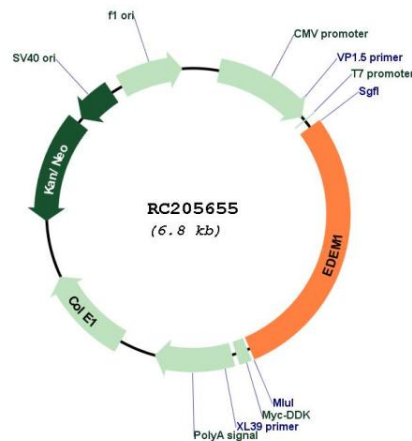
Protein Families: Transmembrane

MW: 73.6 kDa

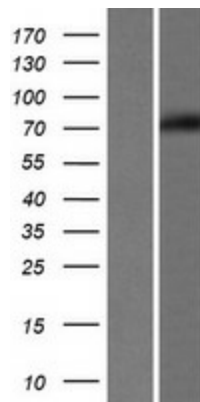
Gene Summary:

Extracts misfolded glycoproteins, but not glycoproteins undergoing productive folding, from the calnexin cycle. It is directly involved in endoplasmic reticulum-associated degradation (ERAD) and targets misfolded glycoproteins for degradation in an N-glycan-independent manner, probably by forming a complex with SEL1L. It has low mannosidase activity, catalyzing mannose trimming from Man8GlcNAc2 to Man7GlcNAc2.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC205655



Western blot validation of overexpression lysate (Cat# [LY415128]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205655 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).