

Product datasheet for **RC211647**

CD97 (ADGRE5) (NM_078481) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD97 (ADGRE5) (NM_078481) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD97
Synonyms:	CD97; TM7LN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC211647 representing NM_078481
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGAGGCCGCTCTTTCTCGCATTCTGTGTCTGGCTGACTCTGCCGGGAGCTGAAACCCAGGACTCCA
GGGCTGTGCCCGTGGTGCCCTCAGAATCCTCGTGTGTCAATGCCACCGCCTGTCGCTGCAATCCAGG
GTTTCAGCTCTTTTCTGAGATCATCACACCCCGACGGAGACTTGTGACGACATCAACGAGTGTGCAACA
CCGTCGAAAGTGTATGCGGAAAATTCTCGGACTGCTGGAACACAGAGGGGAGCTACGACTGCGTGTGCA
GCCCGGATATGAGCCTGTTTCTGGGGCAAAAACATTCAAGAATGAGAGCGAGAACACCTGTCAAGATGT
GGACGAATGTGAGCAGAACCAAGGCTCTGTAAAAGCTACGGCACCTGCGTCAACACCCTTGGCAGCTAT
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CTGCCCGCCGGGCTGGCAACCGATTCCGGGGTCCCCCAATGGCCCAACAATACCGTCTGTGAAGATGTG
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GCTGCCGCTGCCGCCAGGCTGGAAGCCAGACACGGAATCCCGAATAACCAAAAAGGACACTGTCTGTGA
AGATATGACTTTTCTCACCTGGACCCCGCCCTGGAGTCCACAGCCAGACGCTTTCCCGATTCTTCGAC
AAAGTCCAGGACCTGGCAGAGACTCCAAGACAAGCTCAGCCGAGGTACCATCCAGAATGTCATCAAAAT
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ACCTACATTTCCCTTTCGAACACAGAGCTGACCCTGATGATCCAGGAGCGGGGGACAAGAACGCTACTA
TGGGTGAGAGCAGCGACGCATGAAGCTGAATGGGCTGTGGCAGCTGGAGCCGAGGATCCAGGCCCCCG
CGTGGCGGGCATCCTCTCCATCCAGAACATGACGACATTGCTGGCCAATGCCTCCTTGAACCTGCATTCC
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CCGTCACTCCATCTTTCTGAGCCACAACAACCAAGGAACTCACTCCCCATCCTTTTCGCTTCTC
CCACCTTGAGTCTCCGATGGGGAGCGGGAAGAGACCCTCCTGCCAAGGACGTGATGCCTGGGCCACGG
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AGGTGCTGGGCAGCAAGAACGGCAGCACCACTGCCAATGCAGCCACCTGAGCAGCTTTCGATCCTTAT
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GGGAAGAATACCGAAGTGGCCTGCCTAGTTGCTGGGGGAGCAAGTACTCAGAATTCACCTCCACCAC
GTCTGGCACTGGCCACAATCAGACCCGGGCCCTCAGGGCATCAGAGTCCGGCATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211647 representing NM_078481
Red=Cloning site Green=Tags(s)

MGGRVFLAFCVWLTLPGAETQDSRGCARWCPQNSSCVNATACRCNPGFSSFSEIITTPTETCDDINECAT
PSKVSCGKFSDCWNTSEGSYDCVCSPGYEPVSGAKTFKNESENTCQDVDECQONPRLCKSYGTCVNTLGSY
TCQCLPGFKFIPEDPKVCTDVNCTSGQNPCHSSTHCLNNVGSYQCRCRPGWQPIPGSPNGPNNTVCEDV
DECSSGQHQCDSSTVCFNTVGSYSCRCPGWKPRHGIPNNQKDTVCEDMTFSTWTPPPVGHSQTLRFFD
KVQDLGRDSKTSSAEVTIQNVIKLVDELMEAPGDVEALAPPVRHLIATQLLSNLEDIMRILAKSLPKGPF
TYISPSNTELTLMIQERGDKNVTMGQSSARMKLNWAVAAGAEDPGPAVAGILSIQNMTTLLANASLNLHS
KKQAELEEIYESSIRGVQLRRLSAVNSIFLSHNNTKELNSPILFAFSLHLESDGEAGRDPKADVMPGPR
QELLCAFWKSDDRGGHWATEGCQVLGSKNGSTTCQCSHLSSFAILMAHYDVEDWKLTLITRVGLALSLF
CLLLCILTFLLVRPIQGSRTTIHLHLICLIFVGSTIFLAGIENEGGQVGLRCLVAGLLHYCFLA AFCWM
SLEGLELYFLVVRVFGQGLSTRWLCLIGYGVPLLVGVSAAIYSKGYGRPRYCWLD FEQQFLWSFLGPV
TFIILCNAVIFVTTVWKLTKQFSEINPDMKKLKKARALTITAIQLFLLGCTWVFGFLIFDDRSLVLTYY
FTILNCLQGAFLLYLLHCLLNKKVREEYRKWACL VAGGSKYSEFTSTTSGTGHNQTRALRASESGI

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6478_a07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_078481

ORF Size: 2505 bp

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).

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.

RefSeq: [NM_078481.4](#)

RefSeq Size: 3247 bp

RefSeq ORF: 2508 bp

Locus ID: 976

UniProt ID: [P48960](#)

Cytogenetics: 19p13.12

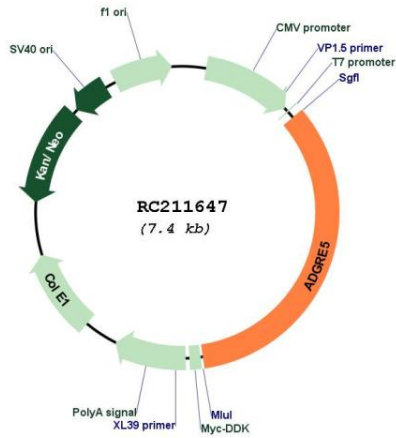
Domains: GPS, 7tm_2, EGF_CA, EGF, EGF

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, GPCR, Secreted Protein, Transmembrane

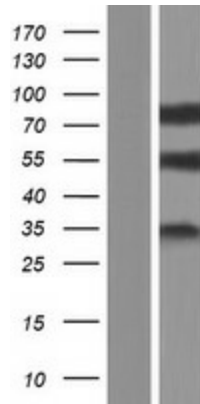
MW: 89.7 kDa

Gene Summary: This gene encodes a member of the EGF-TM7 subfamily of adhesion G protein-coupled receptors, which mediate cell-cell interactions. These proteins are cleaved by self-catalytic proteolysis into a large extracellular subunit and seven-span transmembrane subunit, which associate at the cell surface as a receptor complex. The encoded protein may play a role in cell adhesion as well as leukocyte recruitment, activation and migration, and contains multiple extracellular EGF-like repeats which mediate binding to chondroitin sulfate and the cell surface complement regulatory protein CD55. Expression of this gene may play a role in the progression of several types of cancer. Alternatively spliced transcript variants encoding multiple isoforms with 3 to 5 EGF-like repeats have been observed for this gene. This gene is found in a cluster with other EGF-TM7 genes on the short arm of chromosome 19. [provided by RefSeq, Jun 2011]

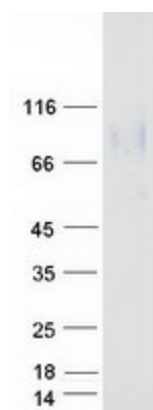
Product images:



Circular map for RC211647



Western blot validation of overexpression lysate (Cat# [LY409190]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211647 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADGRE5 protein (Cat# [TP311647]). The protein was produced from HEK293T cells transfected with ADGRE5 cDNA clone (Cat# RC211647) using MegaTran 2.0 (Cat# [TT210002]).