

Product datasheet for RC200004

OriGene Technologies, Inc.

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Junctional Adhesion Molecule 1 (F11R) (NM 144504) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Junctional Adhesion Molecule 1 (F11R) (NM 144504) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Junctional Adhesion Molecule 1

Synonyms: JAM, KAT, JAM1, JAMA, JCAM, CD321, JAM-1, JAM-A, PAM-1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC200004 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC200004 protein sequence

Red=Cloning site Green=Tags(s)

MGTKAQVERKLLCLFILAILLCSLALGSVTVHSSEPEVRIPENNPVKLSCAYSGFSSPRVEWKFDQGDTT RLVCYNNKITASYEDRVTFLPTGITFKSVTREDTGTYTCMVSEEGGNSYGEVKVKLIVLVPPSKPTVNIP SSATIGNRAVLTCSEQDGSPPSEYTWFKDGIVMPTNPKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEY SCEARNGYGTPMTSNAVRMEAVERNVGVIVAAVLVTLILLGILVFGIWFAYSRGHFDRTKKGTSSKKVIY SQPSARSEGEFKQTSSFLV

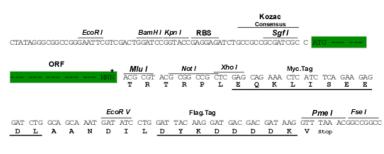
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6051 b06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_144504

ORF Size: 897 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.

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

0.22um filter is required.

RefSeq: <u>NM 144504.1</u>, <u>NP 653087.1</u>

 RefSeq Size:
 3794 bp

 RefSeq ORF:
 899 bp

 Locus ID:
 50848

 Cytogenetics:
 1q23.3

Domains: ig, IGv, IGc2, IG

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Epithelial cell signaling in Helicobacter pylori infection,

Leukocyte transendothelial migration, Tight junction

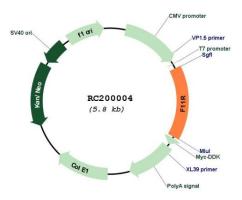
MW: 32.6 kDa

Gene Summary: Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell

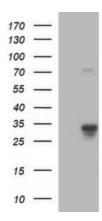
sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. The protein encoded by this immunoglobulin superfamily gene member is an important regulator of tight junction assembly in epithelia. In addition, the encoded protein can act as (1) a receptor for reovirus, (2) a ligand for the integrin LFA1, involved in leukocyte transmigration, and (3) a platelet receptor. Multiple 5' alternatively spliced variants, encoding the same protein, have been identified but their biological validity has not been established. [provided by RefSeq, Jul 2008]



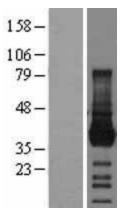
Product images:

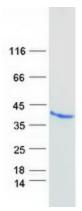


Circular map for RC200004



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY F11R (Cat# RC200004, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-F11R antibody (Cat# [TA506017]). Positive lysates [LY403392] (100ug) and [LC403392] (20ug) can be purchased separately from OriGene.





Western blot validation of overexpression lysate (Cat# [LY403392]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200004 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified F11R protein (Cat# [TP300004]). The protein was produced from HEK293T cells transfected with F11R cDNA clone (Cat# RC200004) using MegaTran 2.0 (Cat# [TT210002]).