

## Product datasheet for **RC221478**

### Junctional Adhesion Molecule 1 (F11R) (NM\_016946) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Junctional Adhesion Molecule 1 (F11R) (NM_016946) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	F11R
Synonyms:	CD321; JAM; JAM1; JAMA; JCAM; KAT; PAM-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC221478 representing NM_016946 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGGGACAAAGGCGCAAGTCGAGAGGAACTGTTGTGCCTTTCATATTGGCGATCCTGTTGTGCTCCC  
TGGCATTGGGCAGTGTTACAGTGCCTCTTCTGAACCTGAAGTCAGAATTCCTGAGAATAATCCTGTGAA  
GTTGTCTGTGCCTACTCGGGCTTTTCTCTCCCGTGTGGAGTGAAGTTTGACCAAGGAGACACCACC  
AGACTCGTTTGTATAATAACAAGATCACAGCTTCCTATGAGGACCGGGTACCTTCTTGCCAACTGGTA  
TCACCTCAAGTCCGTGACACGGGAAGACACTGGGACATACACTTGTATGGTCTCTGAGGAAGGCGGCAA  
CAGCTATGGGGAGGTCAAGGTCAAGTCACTCGTGCTTGTGCCTCCATCCAAGCCTACAGTTAACATCCCC  
TCCTCTGCCACCATTTGGGAACCGGGCAGTGCTGACATGCTCAGAACAAGATGGTTCACCTTCTGAAT  
ACACCTGGTTCAAAGATGGGATAGTGATGCCTACGAATCCAAAAGCACCCTGCCTTCAGCAACTCTTC  
CTATGTCTGAATCCCAACAGGAGAGCTGGTCTTTGATCCCTGTGAGCCTCTGACTGGAGAATAC  
AGCTGTGAGGCACGGAATGGGTATGGGACACCCATGACTTCAAATGCTGTGCGCATGGAAGCTGTGGAGC  
GGAATGTGGGGTTCATCGTGGCAGCCGTCCTTGTAAACCCTGATTCTCTGGGAATCTTGGTTTTTGGCAT  
CTGGTTTTGCCTATAGCCGAGGCCACTTTGACAGAACAAGAAAGGACTTCGAGTAAGAAGGTGATTTAC  
AGCCAGCCTAGTGCCCGAAGTGAAGGAGAATTCAAACAGACCTCGTCATTCTCTGGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221478 representing NM\_016946  
 Red=Cloning site Green=Tags(s)

MGTKAQVERKLLCLFILAILLCSLALGVSIVHSSEPEVRIPENNPVKLSAAYSGFSSPRVEWKFDQGDTT  
 RLVCYNNKITASYEDRVTLPTGITFKSVTREDTGYTCMVSEEGGNSYGEVKKLVIVLPPSKPTVNIP  
 SSATIGNRAVLTCEQDGSPPSEYTWFKDGI VMP TNP KSTRAFSNSSYVLNPTTGELVFDPLSASDTGEY  
 SCEARNGYGT P M T S N A V R M E A V E R N V G V I V A A V L V T L I L L G I L V F G I W F A Y S R G H F D R T K K G T S S K K V I Y  
 SQPSARSEGEFKQTSSFLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

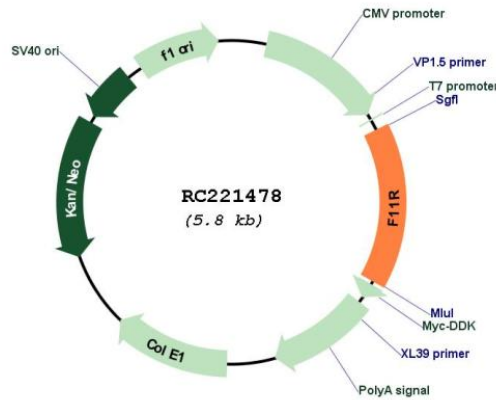
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6577\\_h01.zip](https://cdn.origene.com/chromatograms/mk6577_h01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**

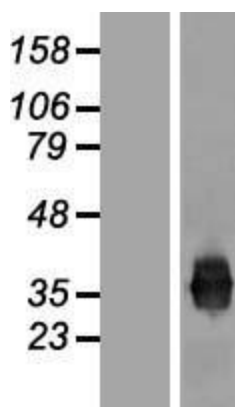


**ACCN:** NM\_016946

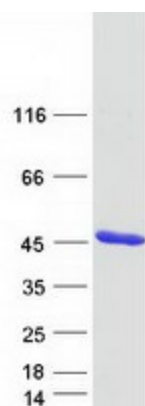
<b>ORF Size:</b>	897 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_016946.6</a>
<b>RefSeq Size:</b>	3660 bp
<b>RefSeq ORF:</b>	900 bp
<b>Locus ID:</b>	50848
<b>UniProt ID:</b>	<a href="#">Q9Y624</a>
<b>Cytogenetics:</b>	1q23.3
<b>Domains:</b>	ig, IGv, IGc2, IG
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cell adhesion molecules (CAMs), Epithelial cell signaling in Helicobacter pylori infection, Leukocyte transendothelial migration, Tight junction
<b>MW:</b>	32.58 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:**

Western blot validation of overexpression lysate (Cat# [LY413796]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221478 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified F11R protein (Cat# [TP321478]). The protein was produced from HEK293T cells transfected with F11R cDNA clone (Cat# RC221478) using MegaTran 2.0 (Cat# [TT210002]).