

## Product datasheet for **RC202149**

### ICA1 (NM\_004968) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ICA1 (NM_004968) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ICA1
Synonyms:	ICA69; ICAp69
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC202149 representing NM\_004968  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCAGGACACAAATGTTATCCCTGGGACTTACAGGATCGATATGCTCAAGATAAGTCAGTTGTAATA  
 AGATGCAACAGAAATATTGGGAGACGAAGCAGGCCTTTATTAAAGCCACAGGGAAGAAGGAAGATGAACA  
 TGTTGTTGCCTCTGACGCGGACCTGGATGCCAAGCTAGAGCTGTTTCATTCAATTCAGAGAACTGTCTG  
 GACTTATCGAAAGCAATTGACTCTATCAAAGAGGATATGTTTCTTGTCTCAAGAAGAAAAACGAACTGG  
 GAAAATTTCTTCGATCCCAAGGTTTCCAAGATAAAACCAGAGCAGGAAAGATGATGCAAGCGACAGGAAA  
 GGCCCTCTGCTTTTCTCCAGCAAAGTTGGCCTTACGAAATCCTTTGTGTGATTTACCAAGAAGTG  
 GAGACTTTTCGGCATCGGCCATCTCAGATACTGGCTGACGGTGAACCGCATGGAACAGTGCAGGACGG  
 AATATAGAGGAGCACTATTATGGATGAAGGACGTGTCTCAGGAGCTTGATCCAGACCTCTACAAGCAAT  
 GGAGAAGTTCAGGAAGGTACAAACACAAGTGCCTTGCAAAAAAAACCTTTGACAAATTGAAGATGGAT  
 GTTTGTCAAAAAGTGGATCTTCTGGAGCGAGCAGATGCAATCTCTTGTCTCACATGCTAGCAACATACC  
 AGACCACTCTGCTTCATTTTTGGGAGAAAACTTCTCACACTATGGCAGCCATCCATGAGAGTTTCAAAGG  
 TTATCAACCATATGAATTTACTACTTTAAAGAGCTTACAAGACCCATGAAAAAATTAGTTGAGAAAAGAA  
 GAGAAGAAGAAAAACAACAGCAGGAAAGTACAGATGCAGCCGTGCAGGAGCCGAGCCAATTAATTTTCAT  
 TAGAGGAAGAAAAACAGCGCAAGGAATCCTCTAGTTTTAAGACTGAAGATGGAAGAAAGTATTTTATCTGC  
 CTTAGACAAAAGGCTCTACACATACTGCATGCTCAGGACCCATAGATGAACTATTAGACATGAAATCTGAG  
 GAAGGTGCTTGCCTGGGACCAGTGGCAGGACCCCGAACCTGAAGGTGCTGACAAGATGACCTGCTGTC  
 GTTTGAGTGAGATCTTCAATGCTTCTCCTTGGAAAGGGCGAGTTCAGCAAAGATGGGCGCTGTGTT  
 TGGAGACGGCCAAGTGAAGGAGCCAGTGCCTTATGGCCCTGGGAGAGCCAGACCCCAAGGCCCGACACA  
 GGCTCAGGTTTCTTCTTCTCGCAGCTTTTAGACAAAATATGAAAGACTTACAGGCTCGCTACAAGAAC  
 CTGCTAAGGCTGCCTCAGACCTGACTGCCTGGTTCAGCCTCTTCGCTGACCTCGACCCACTCTCAAATCC  
 TGATGCTGTTGGGAAAACCGATAAAGAACCGAATTGCTCAATGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC202149 representing NM\_004968  
 Red=Cloning site Green=Tags(s)

MSGHKCYPWDLQDRYAQDKSVVNMQQKYWETKQAFIKATGKKEDEHVVASDADLDAKLELFHSIQRTCL  
 DLSKAIIVLYQKRICFLSQEENELGKFLRSQGFQDKTRAGKMMQATGKALCFSSQQRALALRNPLCRFHQEV  
 ETRFRHRAISDTWLTVNRMEQCRTEYRGALLWMKDVSQELDPDL YKQMEKFRKVQTVRLAKKNFDKLMKD  
 VCQKVDLLGASRCNLLSHMLATYQTLLHFWEKTSHTMAAIHESFKGYQPYEFTTLKSLQDPMKKLVEKE  
 EKKKINQQESTDAAVQEPSQLISLEENQRKESSFKTEDGKSILSALDKGSTHTACSGPIDELDMKSE  
 EGACLGPVAGTPEPEGADKDDLLLLSEIFNASSLEEGEFKEWAAVFDGGVKEPVPTMALGEPDPKAQT  
 GSGFLPSQLLDQNMKDLQASLQEPAKAASDLTAWFSLFADLDPLSNPDAVGKTDKEHELLNA

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2755\\_c10.zip](https://cdn.origene.com/chromatograms/mg2755_c10.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_004968

**ORF Size:** 1446 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:** [NM\\_004968.3](#), [NP\\_004959.2](#)
**RefSeq Size:** 2396 bp

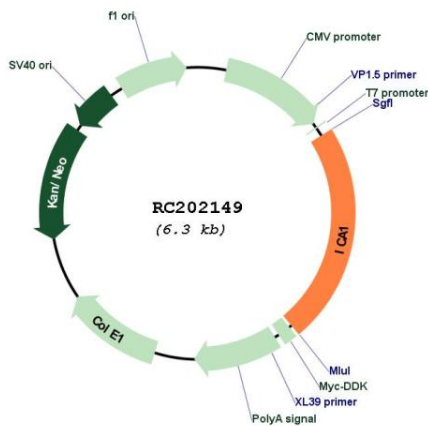
**RefSeq ORF:** 1452 bp

**Locus ID:** 3382

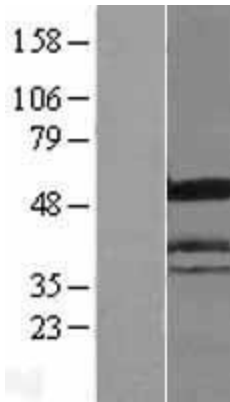
**UniProt ID:** [Q05084](#)  
**Cytogenetics:** 7p21.3  
**Domains:** ICA69  
**Protein Pathways:** Type I diabetes mellitus  
**MW:** 54.5 kDa

**Gene Summary:** This gene encodes a protein with an arfaptin homology domain that is found both in the cytosol and as membrane-bound form on the Golgi complex and immature secretory granules. This protein is believed to be an autoantigen in insulin-dependent diabetes mellitus and primary Sjogren's syndrome. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Feb 2013]

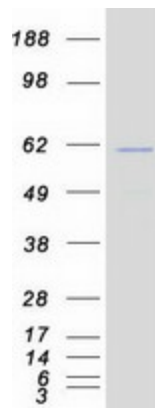
### Product images:



Circular map for RC202149



Western blot validation of overexpression lysate (Cat# [LY427769]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226813] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ICA1 protein (Cat# [TP302149]). The protein was produced from HEK293T cells transfected with ICA1 cDNA clone (Cat# RC202149) using MegaTran 2.0 (Cat# [TT210002]).