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Product datasheet for RC226813

ICA1 (NM_001136020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ICA1 (NM_001136020) 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)

ORF Nucleotide Sequence:

>RC226813 representing NM_001136020
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGGACACAAATGTTATCCCTGGGACTTACAGGATCGATATGCTCAAGATAAGTCAGTTGTAAATA
AGATGCAACAGAAATATTGGGAGACGAAGCAGGCCTTTATTAAAGCCACAGGGAAGAAGGAAGATGAACA
TGTTGTTGCCTCTGACGCGGACCTGGATGCCAAGCTAGAGCTGTTTCATTCAATTCAGAGAACCTGTCTG
GACTTATCGAAAGCAATTGTACTCTATCAAAAGAGGATATGTTTCTTGTCTCAAGAAGAAAACGAACTGG
GAAAATTTCTTCGATCCCAAGGTTTCCAAGATAAAACCAGAGCAGGAAAGATGATGCAAGCGACAGGAAA
GGCCCTCTGCTTTTCTTCCCAGCAAAGGTTGGCCTTACGAAATCCTTTGTGTCGATTTCACCAAGAAGTG
GAGACTTTTCGGCATCGGGCCATCTCAGATACTTGGCTGACGGTGAACCGCATGGAACAGTGCAGGACGG
AATATAGAGGAGCACTATTATGGATGAAGGACGTGTCTCAGGAGCTTGATCCAGACCTCTACAAGCAAAT
GGAGAAGTTCAGGAAGGTACAAACACAAGTGCGCCTTGCAAAAAAAAAACTTTGACAAATTGAAGATGGAT
GTTTGTCAAAAAGTGGATCTTCTTGGAGCGAGCAGATGCAATCTCTTGTCTCACATGCTAGCAACATACC
AGACCACTCTGCTTCATTTTTGGGAGAAAACTTCTCACACTATGGCAGCCATCCATGAGAGTTTCAAAGG
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GAGAAGAAGAAAATCAACCAGCAGGAAAGTACAGATGCAGCCGTGCAGGAGCCGAGCCAATTAATTTCAT
TAGAGGAAGAAAACCAGCGCAAGGAATCCTCTAGTTTTAAGACTGAAGATGGAAAAAGTATTTTATCTGC
CTTAGACAAAGGCTCTACACATACTGCATGCTCAGGACCCATAGATGAACTATTAGACATGAAATCTGAG
GAAGGTGCTTGCCTGGGACCAGTGGCAGGGACCCCGGAACCTGAAGGTGCTGACAAAGATGACCTGCTGC
TGTTGAGTGAGATCTTCAATGCTTCCTCCTTGGAAGAGGGCGAGTTCAGCAAAGAGTGGGCCGCTGTGTT
TGGAGACGGCCAAGTGAAGGAGCCAGTGCCCACTATGGCCCTGGGAGAGCCAGACCCCAAGGCCCAGACA
GGCTCAGGTTTCCTTCCTTCGCAGCTTTTAGACCAAAATATGAAAGACTTACAGGCCTCGCTACAAGAAC
CTGCTAAGGCTGCCTCAGACCTGACTGCCTGGTTCAGCCTCTTCGCTGACCTCGACCCACTCTCAAATCC
TGATGCTGTTGGGAAAACCGATAAAGAACACGAATTGCTCAATGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226813 representing NM_001136020
Red=Cloning site Green=Tags(s)

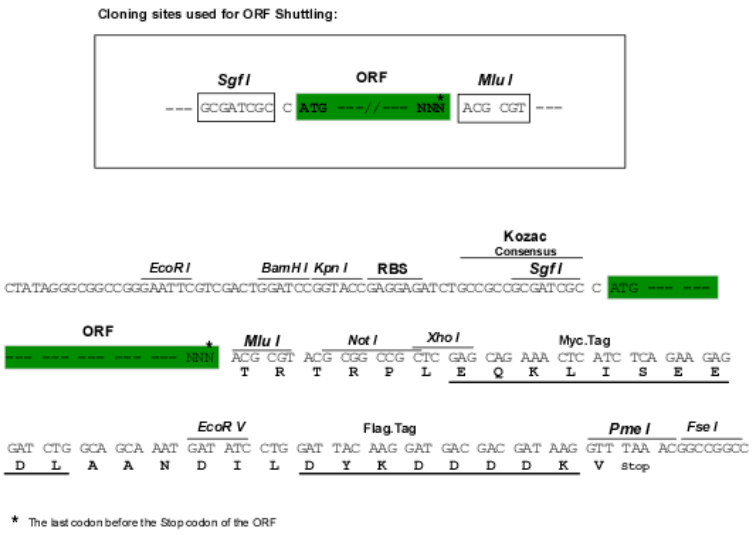
MSGHKCYPWDLQDRYAQDKSVVNKMQQKYWETKQAFIKATGKKEDEHVVASDADLDAKLELFHSIQRTCL
DLSKAIVLYQKRICFLSQEENELGKFLRSQGFQDKTRAGKMMQATGKALCFSSQQRLALRNPLCRFHQEV
ETFRHRAISDTWLTVNRMEQCRTEYRGALLWMKDVSQELDPDLYKQMEKFRKVQTQVRLAKKNFDKLKMD
VCQKVDLLGASRCNLLSHMLATYQTTLLHFWEKTSHTMAAIHESFKGYQPYEFTTLKSLQDPMKKLVEKE
EKKKINQQESTDAAVQEPSQLISLEEENQRKESSSFKTEDGKSILSALDKGSTHTACSGPIDELLDMKSE
EGACLGPVAGTPEPEGADKDDLLLLSEIFNASSLEEGEFSKEWAAVFGDGQVKEPVPTMALGEPDPKAQT
GSGFLPSQLLDQNMKDLQASLQEPAKAASDLTAWFSLFADLDPLSNPDAVGKTDKEHELLNA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2755_c10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001136020

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_001136020.3

RefSeq ORF: 1452 bp

Locus ID: 3382

UniProt ID: Q05084

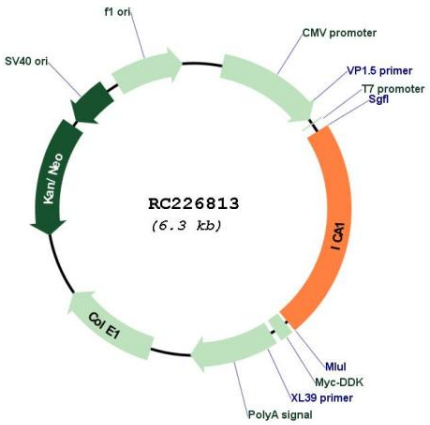
Cytogenetics: 7p21.3

Protein Pathways: Type I diabetes mellitus

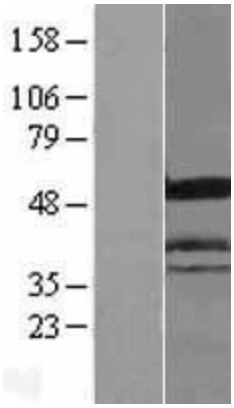
MW: 54.5 kDa

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]

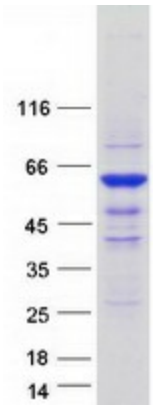
Product images:



Circular map for RC226813



Western blot validation of overexpression lysate (Cat# [LY427769]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected 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# [TP326813]). The protein was produced from HEK293T cells transfected with ICA1 cDNA clone (Cat# RC226813) using MegaTran 2.0 (Cat# [TT210002]).