

Product datasheet for RC212413

IRS2 (NM_003749) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRS2 (NM_003749) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IRS2
Synonyms:	IRS-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212413 representing NM_003749. Blue=ORF Red=Cloning site Green=Tag(s)

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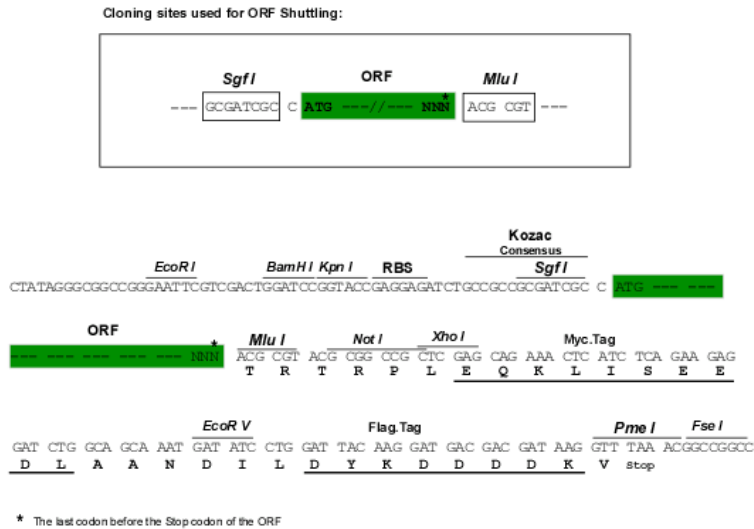
Protein Sequence: >Peptide sequence encoded by RC212413
 Blue=ORF Red=Cloning site Green=Tag(s)

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Chromatograms: https://cdn.origene.com/chromatograms/mg3065_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



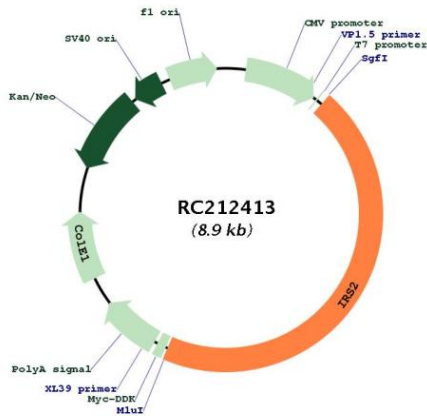
ACCN: NM_003749

ORF Size: 4014 bp

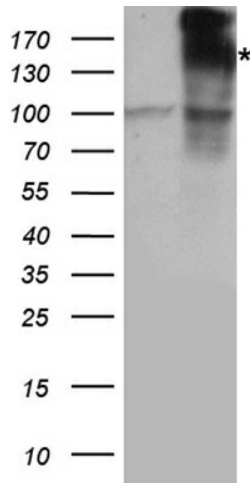
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com 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. More info</p>
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:	<ol style="list-style-type: none"> 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 Size:	7014 bp
RefSeq ORF:	4017 bp
Locus ID:	8660
UniProt ID:	Q9Y4H2
Cytogenetics:	13q34
Protein Families:	Druggable Genome
Protein Pathways:	Adipocytokine signaling pathway, Insulin signaling pathway, Neurotrophin signaling pathway, Type II diabetes mellitus
MW:	137.3 kDa

Gene Summary:

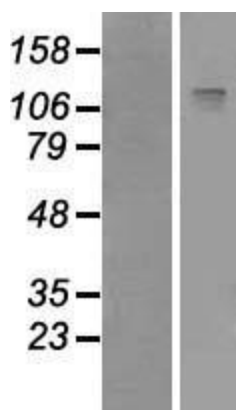
This gene encodes the insulin receptor substrate 2, a cytoplasmic signaling molecule that mediates effects of insulin, insulin-like growth factor 1, and other cytokines by acting as a molecular adaptor between diverse receptor tyrosine kinases and downstream effectors. The product of this gene is phosphorylated by the insulin receptor tyrosine kinase upon receptor stimulation, as well as by an interleukin 4 receptor-associated kinase in response to IL4 treatment. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC212413



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IRS2 (Cat# RC212413, 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-IRS2 antibody (Cat# [TA890130]). Positive lysates [LY418459] (100ug) and [LC418459] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418459]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212413 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).