

Product datasheet for RC208765

IRS1 (NM_005544) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRS1 (NM_005544) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IRS1
Synonyms:	HIRS-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208765 representing NM_005544 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAGCCCTCCGGAGAGCGATGGCTTCTCGGACGTGCGCAAGGTGGGCTACCTGCGCAAACCAAGA
GCATGCACAAACGCTTCTTCGTAAGTGGCGGCGCCAGCGAGGCTGGGGGCCCGCGCGCCTCGAGTACTA
CGAGAACGAGAAGAAGTGGCGGCAAGTCGAGCGCCCCAAACGCTCGATCCCCCTTGAGAGCTGCTTC
AACATCAACAAGCGGGCTGACTCCAAGAACAAGCACCTGGTGGCTCTCTACACCCGGGACGAGCACTTTG
CCATCGCGGGCGGACAGCGAGGCCGAGCAAGACAGCTGGTACCAGGCTCTCTACAGCTGCACAACCGTGC
TAAGGGCCACCACGACGGAGCTGCGGCCCTCGGGCGGGAGGTGGTGGGGCAGCTGCAGCGGCAGCTCC
GGCCTTGGTGAGGCTGGGGAGGACTTGAGCTACGGTGACGTGCCCCAGGACCCGCATTAAGAGGCTCT
GGCAAGTGATCCTGAAGCCCAAGGGCCTGGGTGAGACAAAGAACCTGATTGGTATCTACCGCCTTTGCC
GACCAGCAAGACCATCAGCTTTCGTAAGCTGAAGTGAAGTGGAGGCGAGCGCCGTGGTGTGACGTGATGAAC
ATCAGGCGCTGTGGCCACTCGGAAAATTCTTCTTCATCGAGGTGGGCCGTTCTGCCGTGACGGGGCCCG
GGGAGTTCTGGATGCAGGTGGATGACTCTGTGGTGGCCAGAACATGCACGAGACCATCCTGGAGGCCAT
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CGCCTCCAGTGACGGCGAAGGCACCATGTCCCGCCAGCCTCGGTGGACGGCAGCCCTGTGAGTCCACGC
ACCAACAGAACCACGCCACCGGCATCGGGGAGCGCCCGGCTGACCCCGCTCAACACAGCCGCT
CCATCCCCATGCCGGTTCGCGCTGCTCGCCTTCGGCCACCAGCCGGTCACTGTGCTCCAGTAGCAC
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GGCCACCCTGCACCCAGGAACAGGCTTGGGCACGAGTCCAGCCTTGGCTGGGGATGAAGCAGCCAGTG
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GTGAGAGCAGCTCCACCCGCGCTCAAGTGAAGATTTAAGCGCCTATGCCAGCATCAGTTCCAGAAGCA
GCCAGAGGACCGTCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208765 representing NM_005544
 Red=Cloning site Green=Tags(s)

MASPPESDGFSDVRKVGYL RPKPSMHRFFVLRAASEAGGP ARLEYENEKKWRHKSSAPKRSIPLESCF
 NINKRADSKNKHLVALYTRDEHFAIAADSEAEQDSWYQALLQLHNRAGHHDGAAALGAGGGGSCSGSS
 GLGEAGEDLSYGDVPPGPAFKEVWQVILKPKGLGQTKNLIGIYRLCLTSKTI SFVKLNSEAAAVLQLMN
 IRRCGHSENF FFIEVGRSAVTGPGEFWMQVDDSVVAQNMHETILEAMRAMSDEF RPRRSQS SSSNCSNPI
 SVPLRRHHLNPPPSQVGLTRRSRTESITATSPAS MVGGKPGSFRVRASSDGE GTM SRPASVDGSPVSPS
 TNRTHAHRHRGSARLHPPLNHSRSIPMPASRCS SATSPVLS SSSSTSGHGSTSDCLFPRRSASVSGSP
 SDGGFIS SDEYGS SPCDFRSSF RSVTPDSLGH TTPARGEEELSNYICMGGKGPSTLTAPNGHYILSRGGN
 GHRCTPGTGLGTSPALAGDEAASAADLNRFRKRTHSAGT SPTITHQKTPSQSSVASIEEYTEMPPAYPP
 GGGSGGRLPGHRSAFVPTRSYPEEGLEMHPLERRGGHHRPDSSTLHTDDGYMPMSPGVAPVPSGRKGS
 DYMPMSPKSVSAPQOI INP IRRHPQRVDPNGYMMSPSGGCPD IGGPSSSSSSNAVSGT SYGKLTW
 NGVGGHSHVLPHPKPPVESSGKLLPCTGDYMNMSPVGDSNTSSPDCY YGPEDPQH KPVLSYSLPRS
 FKHTQRPGEPEEGARHQHLRLSTSSGRLLYAATADSSSSTSSDSLGGGYCGARLEPSLPHPHHQLVQPH
 LPRKVDTA AQTNSRLARPTRLSLGDPKASTLPRAREQQQQQPLLHPPEPKSPGEYVNI EFGSDQSYLS
 GPVAFHSSPSVRCPSQLQAPREETGT E EYMKMDLGPGRRAAWQESTGVEMGR L GPAPGAASICRPTR
 AVPSSRGDYMTMQMSCRQSYVDTSPAAPVSYADMRTGIAAEVSLPRATMAA SSSSAASPTGPQGA
 AELAAHSSLLGGPQGGMSAFTRVNLSPNRNQS AKVIRADPQGCRRRHSSETF S STPSATRVGNTVPFG
 AGAAVGGGGSSSSSE DVKRHSSASFENVL R P GELGGAPKEPAKLCGAAGGLENLNYIDL DLVKDFKQ
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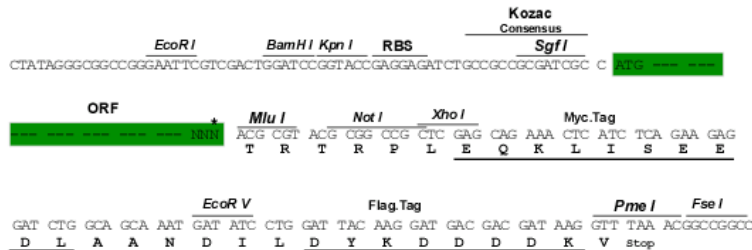
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



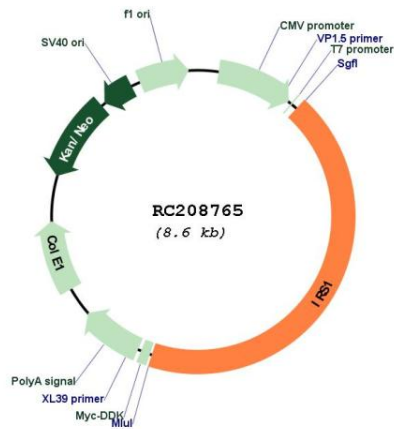
* The last codon before the Stop codon of the ORF

ACCN: NM_005544

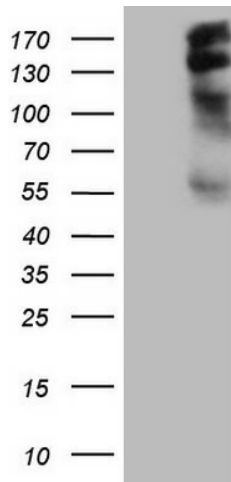
ORF Size: 3726 bp

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:	<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:	NM_005544.2
RefSeq Size:	5828 bp
RefSeq ORF:	3729 bp
Locus ID:	3667
UniProt ID:	P35568
Cytogenetics:	2q36.3
Protein Families:	Druggable Genome
Protein Pathways:	Adipocytokine signaling pathway, Insulin signaling pathway, Neurotrophin signaling pathway, Type II diabetes mellitus
MW:	131.4 kDa
Gene Summary:	This gene encodes a protein which is phosphorylated by insulin receptor tyrosine kinase. Mutations in this gene are associated with type II diabetes and susceptibility to insulin resistance. [provided by RefSeq, Nov 2009]

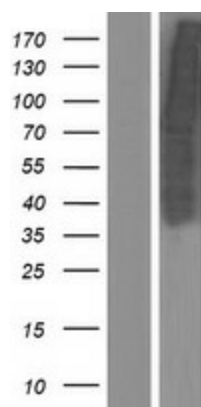
Product images:



Circular map for RC208765



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IRS1 (Cat# RC208765, 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-IRS1 (1:2000) (Cat# [TA808553]). Positive lysates [LY417237] (100ug) and [LC417237] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417237]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208765 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).