

## Product datasheet for RC218385

### IRS4 (NM\_003604) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** IRS4 (NM\_003604) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** IRS4  
**Synonyms:** CHNG9; IRS-4; PY160  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC218385 representing NM\_003604  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGAGTTGCTCCTTCACTCGCGACCAAGCGACAAGAAGACTAAGAGGTGCAGCAGCGGCGGCAGCGG  
 CAGCTCTAGCAGCAGTGGTGACCACCCCGCTTCTTTCTCGGGAACCCGACCGCACTATTGGGACCGG  
 GTCGTCTGTCCGGGAGCCATGTGGCTCTCCACGGCCACTGGCTCCCGGTGAGCTCCGAGTCCGAAGAG  
 GAGGACCTGCCCGTCCGGGAGGAAGTCTGCAAACGCGGCTACCTCGGAAACAGAAGCATGGGCACAGGC  
 GCTACTTCGTGCTCAAACCTCGAGACTGTGACGCCCGAGCTCGGCTGGAATACTACGAAAATGCCAGGAA  
 GTTCCGGCACAGTGTCCGCGCCGCGGGCTGCAGCAGCGCGCGCCTCTGGCGCCGGCATCCCCCG  
 CTCATTCCACCGCGCGCGTGATCACCCATACCAAGTGTCTTTCCGTGAGCCAGCCAGCAGATGCAAGGT  
 ACCGACACCTCATTGCTCTTTTACCCAAGACGAATACTTCGCGATGGTGGCCGAGAACGAGTCCGGAGCA  
 GGAAAGCTGGTACTTGTGCTCAGCCGCTCATCTCGAGAGCAAGCGCCGCGCTGCGGCACGCTCGGC  
 GCGCAGCCGACGGAGAGCCGCGCGCTGGCGGCGCAGCGCGCGGAGCCACCCTTCTATAAAGATG  
 TGTGGCAGGTAATAGTCAAACCCAGGGGCTGGGCGACAGAAAAGAGTGAAGCGCGTGTCCGGCTGTG  
 TCTAACCGACGAGGAGTGTGTTGTGAGGCTGAACACCGAAGTGGCCAGCGTGGTCTCCAGCTCCTG  
 AGCATCCGTCGCTGTGGACTCGGAGCAGTATTTCTTCTGGAAGTAGGCAGGTCCATGTCATCGGTC  
 CGGGAGAGCTCTGGATGCAGGTGATGACTGTGTGGTTGCCAAAACATGCATGAGCTGTTTTGGAGAA  
 GATGAGAGCCTTGTGTCAGACGAATACAGAGCCCGCTGCCGAGCTACAGCATCAGCATCGGCGCCAC  
 CTGTTAACCTGTGTCGCTAGGAGGCACCTGGGCTTGGTCCGCTCGAGCCGGGAGGCTGGCTCAGAA  
 GGTCCCGCTTTGAGCAGTTTTGCCACCTCAGGGCCATCGGCGACGGGAAGACGAGATGCTTTTACCAG  
 GCGCTTCGTAACACCCAGCGAGCCTGTGGCCACTCCAGGCGAGGAAGACTGCACCTGCCAGAGGGCGC  
 AGGTCAAGGAGAGCGTTTCAGTGCCGGCCAGCTTTTTTCGCCGCTTAGCACCCAGCCAGCACGTCCCC  
 GGCACCTGCAGAAGCCCGAACAATGGAGCTCGCTGTCTTCTGAAGTGTCTGGTCTGGCTCTGGCAA  
 CTTTGGGAGGAAGCAATCCCCAGGGCAAAGAAGATCAGGAAGGAAGCGGAGGTGACTACATGCCTATG



[View online >](#)

AACAATTGGGGCTCAGGAAATGGCCGGGGCTCAGGAGGTGGCCAGGGCTCAAATGGCCAAGGCTCCAGTA  
GCCATAGCTCGGGAGGAAACCAGTGTTCAGGCGAGGGACAGGGATCCCGAGGTGGTCAAGGCTCAAATGG  
CCAGGGCTCAGGAGGAAACCAGTGTCTAGAGATGGCCAGGGCACCGCAGGTGGGCACGGTTCAGGTGGT  
GGCCAGAGACCTGGAGGTGGGCATGGCTCAGGTGGTGGCCAGGGACCTGGAGATGGCCATGGCTCAGGTG  
GTGGCAAGAACTCTGGGGGGGCAAAGGCTCAGGAAGTGGGAAAGGATCCGATGGTATGGTGAACGTGG  
AAAATCTCTGAAGAAAAGATCCTATTTTGGCAAATTAACCTCAAAGCAAGCAACAGCAAATGCCACCACCT  
CCACCACCTCCTCCTCCACCCACCAGCTGGAGGAAGTGGGAAAAGGGAAGTCTGGGGGAAGATTCA  
GACTTTATTTTTGTGTTGACAGAGGAGCCACGAAAGAATGCAAAGAAGCCAAAGAAGTGAAGATGCAGA  
GATCCCAGAAGGTGCAGCTCGAGGTCCCCACAGAGCCAGAGCTTTTGATGAAGATGAGGATGACCCATAC  
GTGCCAATGAGGCCAGGGGTGGCCACCCCTCTTGTAAAGCTCCAGTGATTATATGCCAATGGCTCCTCAAA  
ATGTCTCTGCTTCAAAAAGCGCCACTCTCGATCCCTTTTGAAGATTCAAGAGGGTACATGATGATGTT  
TCCCAGAGTGAGCCACCACCTGCTCCGAGTCTCCAAAAGCACCTGATACTAATAAAGAGGATGACTCA  
AAGACAATGACAGTGAGAGTGACTACATGTTTATGGCTCCTGGAGCCGGTGCAATTCAAAAACCCCA  
GAAATCCTCAGGGTGGCTCTTCTCCAAAAGTTGGAGCTCTACTTCTCTACCAAACCTTTTCGGAG  
CTCACCTTTGGGACAGAATGACAACAGTGAGTATGTGCCAATGTTACCTGGAAAGTTCCTGGGGAGGGGC  
CTAGACAAAGAAGTCTCCTATAACTGGGACCCCAAGATGCAGCTTCAAAGCCTTCAGGTGAGGGATCAT  
TCTCAAAGCCTGGAGATGGGGGATCACCTTCAAAGCCTTCAGATCATGAGCCCCAAAGAATAAAGCTAA  
GAGACCTAACCGACTTTCTTTTATTACAAAAGGATATAAAATCAAGCCAAAACCAAAAAGCCACACAT  
GAGCAGAGAGAAGCTGACAGCTCTAGTGACTACGTCAACATGGACTTCACTAAAAGAGAGAGCAATACAC  
CAGCTCCTCTACTCAAGGACTACCAGATTCGTGGGGCATAATTGCTGAACCCAGACAGTCAAGCCTTTTC  
TAATTATGTGAATGTTGAGTTTGGAGTGCCATTTCCAAATCCAGCAAACGACCTCTCAGATCTTTTAAGA  
GCTATACCACGTGCCAACCCCTTATCTCTGGACAGTGCTAGGTGGCCACTTCTCCCTTCCCCTCAGTG  
CTACAGGTAGCAATGCTATTGAGGAAGAGGGTGACTACATTGAAGTAATTTTCAACTCAGCAATGACACC  
AGCCATGGCTCTTGCTGACAGTGCCATTCGCTATGATGCTGAAACAGGTGGAATCTATGTGGTCCGCCCA  
TTTTCTGAGTGCTGTATGGATATTTCTCTCTCCCCAGCCGATGTTCTGAACCACCACCTGTAGCTAGGC  
TGCTGCAGGAAGAAGAGCAGGAGAGAAGACGCCCAAAAGCCGTTCTCAAAGTTTCTTTCAGCAGCCAG  
AGCCGCTGTCTCTGCTTTTCCAACAGACAGCCTCGAGAGAGACCTTTCCCATCCTCAGCCCCGGCTGTC  
GCTTCGGCTGCAGAGCCGACTTTAGCCCTCAGCCAAGTTGTAGCTGCGGCTCCGCGCTCGCCGAGCCC  
CGGGCATCGGCGCAGCAGCCGAGCTGCTGGATTTGACTCCGCTCTGCCGCTGGTTTCAACCTGTTGC  
TAATGCTGCTGATGCCAAGCAGTAAGGGGAGCCCAAGACGTTGCCGGTGGCTCGAACCTGGAGCCCCAC  
AACCCATCTGAAACCTTGCCAGAGGTGATAACCAGGCTGGCGGGCTGCCGCTGCAGCTGCCGCTCCGG  
AACCCACCTCGAGTCCGCGGTGCCAAGACCCCGGAGAGAGAAGATTCTGACAACGACGACGACAC  
TCAGTGAGAATGGATTTGCCAGAGCTGATAATCAGTTCGACTCTCCAAAAGAGGTCCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC218385 representing NM\_003604  
Red=Cloning site Green=Tags(s)

MASCSFTRDQATRRLRGAAAAAALAAVVTPLLSGGTPTALIGTGSSCPGAMWLSTATGSRDSESEE  
EDLPVGEEVCKRGYLRKQKHGRRYFVLKLETADAPARLEYENARKFRHSVRAAAAAAAAAASGAAIIP  
LIPRRRIVITLYQCFSVSQRADARYRHLIALFTQDEYFAMVAENESEQESWYLLLSRLILESKRRRCGTLG  
AQPDPGEPALAAAAAEPFFYKDVWQVIKPRGLGHRKELSGVFRLCLTDEEVFVRLNTEVASVVVQLL  
SIRRCGHSEQYFFLEVGRSTVIGPGLWMQVDDCVVAQNMHELFLKMRALCADEYRARCRSYSISIGAH  
LLTLLSARRHLGLVPLEPGWLRRSRFEQFCHLRAIGDGEDEMLFTRRFVTPSEPVAHSRRGRLHLPGR  
RSRRRAVSVPASFRRRLAPSPARPRHPAEAPNNGARLSSEVSGSGSGNFGEENPQKEDQEGSGGDYMPM  
NNWGSNGRGGSGGQGSNGQSSSHSSGGNQCSGEGQSGRGGQGSNGQSGGNQCSRDGGTAGGHGSGG  
GQRPGGGHGSGGQGPGDGHGSGGGKNSGGGKSGSGKSGDGDGERGKSLKKRSYFGKLTQSKQQMPPP  
PPPPPPPPAGGTGGKSGGRFRLYFCVDRGATKECKEAKVKDAEIPGAARGPHRARAFDEDEDDPY  
VPMRPGVATPLVSSDYMPMAPQNVASAKKRHSRSPFEDSRGYMMFPRVSPPPAPSPKAPDTNKEDDS  
KDNDSESDYMFMAPGAGAIKPNRNPQGGSSKSWSSYFSLPNPFRSSPLGQNDNSEYVPLPGKFLGRG  
LDKEVSNWDPKDAASKPSGEGFSKPGDGGSPSKPSDHEPPKNKAKRPNRSLFITKGYIKPKPKQPTH  
EQREADSSSDYVNMDFTKRESNTPAPSTQGLPDSWGIIEPRQSASFSNYVNEFVGFPPNPANDLSDLLR  
AIPRANPLSLDSARWPLPLPLSATGSNAIEEGDYIEVIFNSAMTPAMALADSAIRYDAETGRIYVDP  
FSECCMDISLSPSRCSEPPPVARLLQEEEQERRRPQRSQSFFAAARAASAFPTDSLRLDLPSSAPAV  
ASAAEPTLALSQVVAASALAAAPGIGAAAAAGFDSASARWFQPVANAADAEAVRGAQDVAGGSNPGA  
NPSANLARGDNQAGGAAAAAEPPPRSRRVPRPPEREDSDNDDTHVRMDFARRDNQFDSPKRGR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6168\\_b10.zip](https://cdn.origene.com/chromatograms/mk6168_b10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

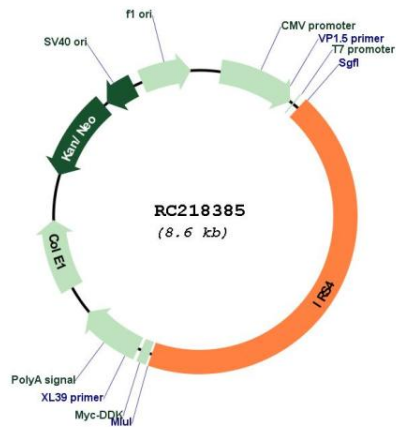


**ACCN:** NM\_003604

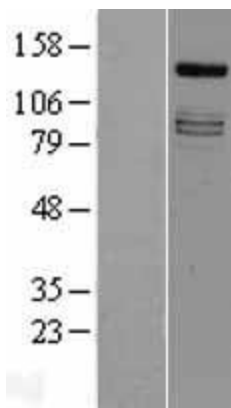
**ORF Size:** 3771 bp

<b>OTI Disclaimer:</b>	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>
<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_003604.2</a>
<b>RefSeq Size:</b>	3939 bp
<b>RefSeq ORF:</b>	3774 bp
<b>Locus ID:</b>	8471
<b>UniProt ID:</b>	<a href="#">O14654</a>
<b>Cytogenetics:</b>	Xq22.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Adipocytokine signaling pathway, Insulin signaling pathway, Neurotrophin signaling pathway, Type II diabetes mellitus
<b>MW:</b>	133.6 kDa
<b>Gene Summary:</b>	IRS4 encodes the insulin receptor substrate 4, a cytoplasmic protein that contains many potential tyrosine and serine/threonine phosphorylation sites. Tyrosine-phosphorylated IRS4 protein has been shown to associate with cytoplasmic signalling molecules that contain SH2 domains. The IRS4 protein is phosphorylated by the insulin receptor tyrosine kinase upon receptor stimulation.. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC218385



Western blot validation of overexpression lysate (Cat# [LY401194]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218385 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).