

Product datasheet for MC223965

Irs4 (NM_010572) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Irs4 (NM_010572) Mouse Untagged Clone
Tag: Tag Free
Symbol: Irs4
Synonyms: IRS-4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223965 representing NM_010572
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAGTTGCTCCTTCTCTGGCCACCAAGCGCTTAGGAGACTGAGAGCCTCAGCAGCAGCAGCAGCCT
CCGCAGCTCTAGCAGCAGTGGCGACCACCCCGCTCCTTTCCTCGGAACCCGGACCGCACTATTGGGAC
CGGGTCGTCTGTCCGGGAGCCATGTGGCTCTCCACAGCCACTGGCTCCCGGTCCAGACTCGGAATCCGAA
GAGGAGGACCTCCCGTCCGGGATGAAGTCTGCAAACCGCGCTACCTGAGGAAGCAGAAGCATGGGCATA
GGCGTTACTTCGTGCTCAAACCTCGAGACCCGAGACGCTCCAGCTCGACTCGAATACTACCGAAATGCCAG
GAAGTCCGGCACAGTGTCCGCGCCGCGGGCTGCAGCAGAGGCGGCCCTCCGGTGTGCGGTCCCC
GCGCTCATCCCACCACGGCGCGTGATCATCCTGTACCAATGCTTCTCCGTGAGCCAGCGCCGATGCCA
GGTACCGACACCTCATTGCCCTTTTACCAGGACGAATACTTCGCGATGGTGGCCGAGAACGAGTCGGA
ACAAGAAAGCTGGTACTTGCTCCTCAGCCGCTCATCCTCGAGAGCAAGCGCCGCGCTGCGGCACGCTA
GGCGCACTGCCGACGGAGAGCCGCGAGCCCTGGCGCCGACGCGGGCGGAGCCACCTTCTACAAAG
ATGTGTGGCAGGTAGTAGTGAAACCCAGGGGGCTGGGGCACAGAAAAGAGCTGAGCGCGTGTCCGGCT
GTGTCTTACCAGCAAGAGGTAGTGTGTAAGGCTCAATACCGAAGTGGCCAGTGTGGTGTCCAGCTG
CTGAGCATTTCGTGCTGTGGCACTCGGAGCAGTACTTCTTCTTGGAAAGTCGGCAGATCCACTGTATAG
GTCCGGGGGAGCTGTGGATGCAAGTGGATGACTCCGTGGTGGCCAAAATATGCATGAGCTGTTTCTGGA
GAAGATGAGAGCCTTGTGCGCAGATGAATACAGAGCCCGATGCCGAGCTACAGCATCAGTATTGGCGCC
CACCTGTTAACCTGCTGCCACTAGGAGGCACCTGGGCTTGCTCCCGCTGGAGCCTGGTGGCTGGCTCA
GAAGATACGGCTTGAGCAGTTTTGCCGCTCAGAGCTATCCGTGAGAGGGAAGAGATGCTATTACCAG
GCGTTTCATCTACCCAGAGAGCCTCCGCTCCCTTTAGGCGAGGAAGAGGACCTGCCAGAGCCCGC
AGGTCCAGGAGAGCCGCTCAGTACCACCCAGCCTTTTCCGACGCTCAGCACCTAGCCCGGAAGGATCC
CACAGCCTGAAGATGTCCCAACGACAGAGCCCGTGAAGCCTCCGGTTCAGCTCTGGCAACACTGAAGA
AAAAGACAAGGAGGGTGAGGAAGGAAACCAGGATGATTGCATACCTATGAACAACCTGGGGCTCAGGAAAT
GGCCGGGGCTCAGGAGGTGGACGGGGCTCAAGTGGCAAGGTTCCAGTAGCCAGGGCTCAGGTGGGAGAC



[View online »](#)

AGGGATCTGGAGGTGGCCAGGGCTCAGGAGGCCAGGGTGCCGGAGGAAACCAGTGTTCAGGAAATGGCCA
GGGCACAGCAGGTGGCCATGGCTCAGGTGGAGGTGGCCATGGCTCAGGCGGTGGCCAGAGACCTGGAGAT
GGTCATGGCTCAGGTGGTGGCAAGAACTCAGGAAGTGGGAAAAATTCGACGATGGTGACCGTGGAAAAAT
CTGTGAAGAAAAGATCCTACTTTGGTAAATTCCTCAAAGCAAGCAGCAGCAAACACTGCCTCCACCCCC
ACCGCCACCGCCAGCAGCTGGAGCAACTGGTGGCAAAGGGAAGTCTGGAGGAAGATTCCGACTTTATTTT
TGCGCAGACAGAGGCACAAAAGAACGCAAGAAGCCAAAGAGGTAAAGAGATATGGAGACCTCAGGAGGTG
CTACCCCGGGGCTTACAGAGCCAGAGCTTCGATGAAGATGAGGATGACCCGTATGTGCCAATGAGACC
AGGGGTGGCTGCCCTCTTGCCTGTTCCAGTGATTATATGCCAATGGCTCCTCAAATTCCTCTGCTTCA
ACAAAACGCCACTCTAGGTCACCCTTTGAAGACTCCAGAGGGTACATGATGATGTTTTCCAGAGTGAACC
CCCCACCACCTGTCCAAGTGCTCCGAAAGCACCAGCACCAATAAAGGGGATGACTCAAAGGACAAATGA
CAGTGACAGTGATTACATGTTTTGCTCCCGAGCAGGTGCGATTCTAAAAATCCTCCCAATGCGCAG
GGAGGCTCTTCTCAAAGCTGGAGCTCGTATTTCTCTGCAAGTCTTTTCCAGAGTTCACCTTTGG
GACAGAGTGACCACAGTGAGTATGTTTCTATGTTACCTGGAAAATTCCTGGGAGCGGTCTACACAAAGA
AGCCTCCTTAGCCAGGGCACAAAAATGTGTCTCAAAGCCTTCAACTGAGGCGTCATTCTCAAACCC
GAAGATAAAGGGTCATCTGCAAAGCCTTCAGATGATGTGCCCCAATGAACAAGGCTAAGGAACCTAAC
ACTTTTCTTTTATTGCAAAGGAACTCAAGTAAAGCCAAACCGCTAAACCCACACAGGAGCGGAGAGA
AGCTGCTGGCTCCCGTACTATATCAACATTGACTTTATTAAGAGAGAGCGCCTTGCTGCTACCTTCTCT
GCTCAAGGACTGCCAGACATGCGGGGCGTAGTTACTGACCCCGCACCCACAGCTTTTTCTGGCTACCTGA
ATGTTGAATTCGGGGTGCCTTCCCAAATCCAACAATCCGCTCTCAGATCTTTAAGAGTTCTACCAGG
TGCCAACCTCCATCCCTCTGGCCGGTACTAGGTGGCCCTTCCAGGCAGTGTATAGGTAGCATTGTGGAA
GCGGGAGAATACATTGAAGTTATTTCAACCCGGCTATGACACCAGCCATGTCTTTTGTGACAGTGCCA
TTTGCTATGATGCTCAAACAGGTCAAATCTATGTCGTCGACCCATTTTCTGAGTGCTGTATGGACGTTTC
TCTCTCTGGTGGTCTGCTGTAACCGCCACCTGTAGCTAGGCTGCGGGGGAGGAAGCGCAGGAGAGA
AGACGCCCAAAAGCCGCTCCCAAAGTTTATTTGCCAGCACTCGAGCCGCGGTCTCGGCTTTCCCGACTG
ACAGCTTGGACAGAGACTTTCCCGCGCTTCTGCGGTGATTGCTGCTCCAGCTGAGGCGCCTCTCTTGGC
AGTGAGCCGGGCTTAGCCGTGGTCTCTGCGCTCGCAGCGGCCCCAGCATAGGCGACGCTTTTGCAGGC
TTCCGCGCTGCGGCAGGAGTTGACTCCGCTCCGCTCGCGGGTTCCAACCTGTTGCGGGTCCCAGGCTG
TAAGAGAATTCAGGACCTTCCCGCAGGCTGGAATCCTGGAGCCCTTAAACACAGGGCCCGAGGTGAGGA
CCTGGCCCGCGCAGCGGCTCCCCGCCACCTCGCCAGATTTGGGTGCTGAGACCCCAAGAGAGA
GCGGATTCTGAGGACGACGACGATGATGACGACACATTTACGTGAGAATGGACTTGGCAGACGAGACT
ACAGGAAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_010572

Insert Size:

3651 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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.

RefSeq: [NM_010572.2](#), [NP_034702.2](#)

RefSeq Size: 6269 bp

RefSeq ORF: 3651 bp

Locus ID: 16370

UniProt ID: [Q9Z0Y7](#)

Cytogenetics: X 62.43 cM

Gene Summary: Acts as an interface between multiple growth factor receptors possessing tyrosine kinase activity, such as insulin receptor, IGF1R and FGFR1, and a complex network of intracellular signaling molecules containing SH2 domains. Involved in the IGF1R mitogenic signaling pathway. Promotes the AKT1 signaling pathway and BAD phosphorylation during insulin stimulation without activation of RPS6KB1 or the inhibition of apoptosis. Interaction with GRB2 enhances insulin-stimulated mitogen-activated protein kinase activity. May be involved in nonreceptor tyrosine kinase signaling in myoblasts. Plays a pivotal role in the proliferation/differentiation of hepatoblastoma cell through EPHB2 activation upon IGF1 stimulation. May play a role in the signal transduction in response to insulin and to a lesser extent in response to IL4 and GH on mitogenesis. Plays a role in growth, reproduction and glucose homeostasis. May act as negative regulators of the IGF1 signaling pathway by suppressing the function of IRS1 and IRS2.[UniProtKB/Swiss-Prot Function]