

## Product datasheet for MC224356

### Insr (NM\_010568) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Insr (NM_010568) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Insr
Synonyms:	4932439J01Rik; CD220; D630014A15Rik; I; IR; IR-A; IR-B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224356 representing NM_010568 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCTTCGGGAGAGGATGTGAGACGACGGCTGTGCCATTGCTGGTGGCCGTGGCCGCTTGTGGTGG  
GCACAGCCGGCCACCTGTACCCTGGAGAGGTGTGCCCTGGTATGGACATCCGGAACAACCTGACCAGGCT  
ACATGAGCTGGAGAACTGCTCAGTCATTGAGGGCCATCTGCAGATCCTCCTGATGTTCAAGACCAGACCC  
GAAGATTCGGAGACCTCAGTTTCCCAAATCATCATGATCACAGATTACCTGCTTCTCTCCGTGTCT  
ATGGTCTGGAAAGTCTGAAAGACCTCTCCCAAATCTCACAGTCATCCGAGGCTCCCGTCTCTTCTTCAA  
CTATGCCCTGGTTATCTTCGAGATGGTCCACCTGAAGGAGCTGGGGCTTTATAACCTCATGAACATCACC  
CGGGGCTCTGTCCGCATCGAAGAATAATGAGCTCTGCTACCTGGCCACTATCGACTGGTCCCCTATCC  
TGGATTCTGTGGAGGACAACCTACATTGTAAGTGAACAAAGATGACAACGAGGAATGTGGGGATGTCTGTCC  
AGGCACCGCCAAGGGCAAGCAACTGTCTGCCACTGTCAATGGGCAGTTTGTGGAACGGTGTCTGG  
ACACACAGTCATTGTGAGAAAGTTTGCACAACCTCTGTAAGTCACATGGCTGCACAGCTGAAGGCTGT  
GCTGCCACAAGAGTGCCTGGCAACTGTTCCGAACTGATGACCCCAAGTGTGTGGCTGTGCGAA  
CTTCTATCTGGATGGTCACTGTGTGGAGACCTGCCCGCCACCCTACTATCACTCCAGGACTGGCGCTGT  
GTGAATTCAGCTTCTGCCAAGACCTTCACTTCAAATGCAGAACTCTCGGAAGCTGGTCCCAACT  
AGGTCATTCACAACAATAAGTGATCCCGAGTGCCTGGCTATACCATGAATTCCAGCAACTTGAT  
GTGCACCCATGTCTGGACCTGCCCTAAGGTCTGCCAAATCCTCGAAGGTGAGAAGACCATTGATTCT  
GTGACATCTGCCAGGAGCTCCGAGGCTGCACTGTGATCAACGGTAGCCTGATCATCAACATCCGAGGGG  
GCAACAACCTGGCAGCTGAGCTGGAGGCTAACCTTGGCCTCATTGAAGAAATTCGGGATTTCTAAAGAT  
CCGCCGCTCTATGCTCTGGTATCACTTTCTTTCTTCCAGGAAGCTACATCTGATTCGAGGAGAGACCTTG  
GAAATTGGGAATATTCTTTTTATGCCTTGGACAACCAGAACCTGAGGCAACTCTGGGACTGGAGCAAC  
ACAACCTCACCATCACTCAGGGCAAGCTCTTCTCCATTACAACCCGAACTCTGCTTGTCTGAAATTCA  
CAAGATGGAAGAAGTCTCCGGAATAAGGGCCGTGAGGAGGAAACGACATTGCCCTGAAGACCAATGGG



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GACCAGGCATCGTGTGAAAATGAATTGCTTAAATTTCTTTTCATTCCGGACATCTTTTGACAAGATCCTGT  
 TGAGGTGGGAACCTACTGGCCCCGACTTCCGAGATCTCCTGGGATTCATGTTGTTCTACAAAGAGGC  
 CCCTTATCAGAATGTGACAGAGTTTGTGGGCAGGATGCTTGTGGCTCCAACAGCTGGACTGTGGTGGAT  
 ATTGACCCGCCAGAGGTCCAACGACCCCAAGTCTCAGACCCCAAGCCACCCTGGGTGGCTGATGCGGG  
 GCCTCAAACCTGGACCAATACGCCATCTTTGTGAAGACCTGGTTACCTTCTCTGATGAACGGCGGAC  
 CTATGGAGCCAAAAGTGATATCATCTATGTGCAAAACAGATGCCACTAATCCTTCTGTCCCCTGGATCCC  
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 TCACACACTACCTGGTGTACTGGGAGAGGCAAGCAGAGGACAGCGAGCTGTTTGAGCTGGATTATTGTCT  
 CAAAGGGCTGAAGCTCCCTTACGGACCTGGTCCCACCCTTTGAGTCTGATGATTCTCAGAAGCACAAT  
 CAGAGTGAGTATGACGACTCGGCCAGTGAGTGCTGCTCATGCCCTAAGACTGACTCTCAGATCCTGAAGG  
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 ATCCCGAAAGCGAAGATCCCTTGAAGAGGTGGGAATGTGACAGCCACCACACTCACACTCCAGATTTT  
 CCCAACGTCTCCTACCATTGTGCCACAAGTCAGGAGGACAGGCCATTTGAGAAAGTGGTGAACA  
 AGGAGTCACTTGTCTCTGGCCTGAGACACTCACTGGTACCGCATTGAGCTGCAGGCATGCAATCA  
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 CAAAGGAACCTAATGGTCTGATTGTGCTATATGAAGTGAGCTATCGCCGATATGGTGATGAGGAGCTGCA  
 CCTCTGTGCTCCCGAAGCATTGTCCTGGAGCGGGCTGCAGGCTGCGAGGGCTCTCCCAGGAAAC  
 TACAGTGTTCGAGTCCGGCTACCTCTCTGGCAGGAAATGGTCTCTGGACAGAACCACCTATTTTTATG  
 TGACTGATTATTTAGATGCCATCAAATATTGCCAAAATATCATTGGACCCCTCATCTTTGTCTTCT  
 CTTCAGTGTGTGATTGGAAGTATTTATCTATTTCTGAGAAAGAGGCAGCCGGATGGGCCAATGGGACCA  
 CTGTATGCATCTTCAAACCTGAGTACCTCAGTGCCAGTGATGTGTTCCATCTTCTGTACGTGCCGG  
 ACGAGTGGGAGGTGCCTCGAGAGAAGATCACCTTCTTCGAGAGCTGGGGCAGGGATCCTTGGTATGGT  
 GTATGAAGGCAATGCCAAGGATATCATCAAGGGTGAGGCAGAGACCCGTGTTGCGGTTAAGACTGTCAAT  
 GAGTCAGCCAGTCTTCGAGAACGGATCGAGTTCCTCAATGAGGCATCAGTCATGAAGGGATTACCTGCC  
 ATCATGTGGTCCGCTTCTTGGGGTGGTATCCAAAGGACAGCCAACGCTGGTAGTGATGGAATTGATGGC  
 TCATGGAGACCTGAAAAGTCACTCCGTTCTCTGAGGCCAGATGCTGAGAATAACCCAGGCCGCCCTCCC  
 CCTACCTTGCAAGAAATGATTGAGATGACAGCAGAAATGCTGATGGCATGGCATACTTGAACGCCAAGA  
 AGTTTGTGACCCGGACCTGGCAGCTCGAAACTGCATGGTTGCCCATGATTTTACTGTCAAATTTGGAGA  
 CTTTGAATGACAAGGGACATCTACGAGACAGATTACTATCGAAAGGGGCAAGGGACTGCTTCTCTGTG  
 AGGTGGATGTACCTGAGTCCCTGAAGGATGGAGTCTTTACTGCTTCTTCTGATATGTGGTCTTTGGGG  
 TGGTCTTTGGGAAATCACTAGCCTGGCTGAGCAACCTTATCAAGGCCTGTCTAATGAACAGGTGTTGAA  
 GTTTGTCATGGATGGAGGCTATCTGGATCCCCCTGATAACTGTCCAGAGAGACTCACTGACCTGATGCGC  
 ATGTGCTGGCAGTTCAACCCCAAGATGAGGCCAACCTTCTGGAATCGTCAACCTGCTCAAGGATGACC  
 TCCACCCAGCTTTCCAGAAGTTTCTTCTTCTACAGCGAGGAGAACAAGGCTCCTGAGAGTGAGGAGCT  
 GGAGATGGAGTTTGAAGACATGGAGAATGTCCGTTGGATCGTTCTCTCACTGTGAGAGAGAAGAGGCT  
 GGGGGCCGGGAGGGAGGGTCTCACTGAGCATCAAACGGACCTATGATGAACACATCCCCTATACCCACA  
 TGAATGGGGCAAGAAGAACGGACGTGTCCTTACCCTGCCAAGGTCAAACCTTCC**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1955\\_h09.zip](https://cdn.origene.com/chromatograms/ja1955_h09.zip)  
**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_010568  
**Insert Size:** 4119 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_010568.2](#), [NP\\_034698.2](#)

**RefSeq Size:** 9357 bp

**RefSeq ORF:** 4119 bp

**Locus ID:** 16337

**UniProt ID:** [P15208](#)

**Cytogenetics:** 8 1.82 cM

**Gene Summary:** This gene encodes a member of the receptor tyrosine kinase family of transmembrane signaling proteins that play important roles in cell differentiation, growth and metabolism. The encoded preproprotein undergoes proteolytic processing to generate alpha and beta chains that form a disulfide-linked heterodimer which, in turn homodimerizes to form a mature, functional receptor. Mice lacking the encoded protein develop severe hyperglycemia and hyperketonemia, and die within a couple of days after birth as a result of diabetic ketoacidosis. [provided by RefSeq, Aug 2016]

**Transcript Variant:** This variant (1) represents the shorter transcript and encodes the shorter protein (isoform A). **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments and orthologous data.