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Product datasheet for SC311328

Insulin Receptor (INSR) (NM_000208) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Insulin Receptor (INSR) (NM_000208) Human Untagged Clone
Tag:	Tag Free
Symbol:	Insulin Receptor
Synonyms:	CD220; HHF5
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

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>OriGene sequence for NM_000208 edited
AATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCG
TCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGGAGCT
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000208 unedited
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CGCAGGGCCTCCGCTCAGTATTTGTAGCTGGCGAAGCCGCGCGCGCCCTTCCCGGGGCTG
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GAAGAACATGAGCTCTGGTACTTGGCCACTATCGACTGGTCCCGTATCCTGGATTCCCTG
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3' Read Nucleotide Sequence:

>Forward primer walk for NM_000208 unedited
CTGGATTATGCGTNCAGAGGCTGNAACTGCCCTCNAGACCTGTCTCCACCTTCGAGTCTG
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TGCGACACTTCACGGGCTATCGCATCGAGCTGCAGGCTTGCAACCAGGACACCCCTGAGG
AACGGTGCAGTGTGGCAGCCTACGTCAGTGCGAGGACCATGCCTGAAGCCAAGGCTGATG
ACATTGTTGGCCCTGTGACGCATGAAATCTTTGAGAACAACGTCGTCCACTTGATGTGGC
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GGCTGCGTGGGCTGTCACCGGGGAACTACAGCGTGCGAATCCGGGCCACCTCCCTTGCGG
GCAACGGCTCTTGGACGGGACCCACCTATTTCTACGTGA

Restriction Sites: Please inquire

ACCN: NM_000208

Insert Size: 5000 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 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
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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_000208.1, NP_000199.1
RefSeq Size:	9059 bp
RefSeq ORF:	4149 bp
Locus ID:	3643
UniProt ID:	P06213
Cytogenetics:	19p13.2
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Adherens junction, Insulin signaling pathway, Type II diabetes mellitus

Gene Summary: This gene encodes a member of the receptor tyrosine kinase family of proteins. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that form a heterotetrameric receptor. Binding of insulin or other ligands to this receptor activates the insulin signaling pathway, which regulates glucose uptake and release, as well as the synthesis and storage of carbohydrates, lipids and protein. Mutations in this gene underlie the inherited severe insulin resistance syndromes including type A insulin resistance syndrome, Donohue syndrome and Rabson-Mendenhall syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (Long). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.