*h*Insulin R/CD220 VersaClone cDNA

Catalog Number: RDC1239

Specifications:

Gene:	*h*INSR
Accession:	NP_000199
Insert size:	4162bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

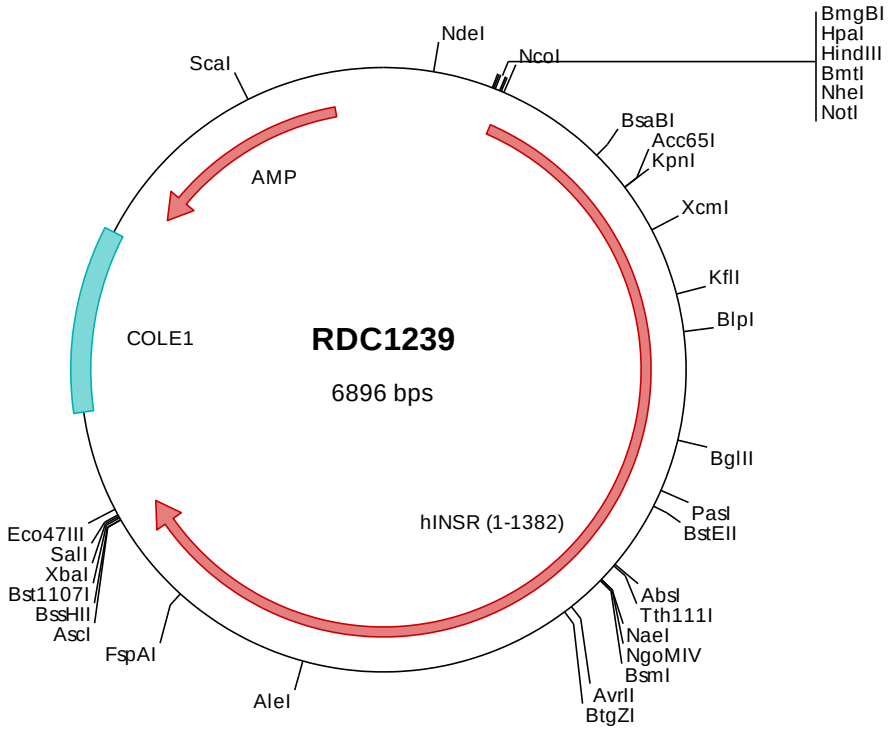
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*Insulin R/CD22cDNA Plasmid

INSR insulin receptor [*Homo sapiens* (human)]

Also known as: HHF5; CD220

Summary:
INSR is a type I transmembrane glycoprotein in the Insulin/IGF Receptor subfamily of the receptor tyrosine kinases. It is post-translationally cleaved into an extracellular alpha-subunit and a transmembrane beta-subunit with intracellular tyrosine kinase activity. The insulin receptor homodimers are activated by insulin and, in adults, mediate an increase in glucose uptake through upregulation of GLUT4 expression. Decreases in INSR signaling causing 'insulin resistance' is a major component in the development of type 2 diabetes. Alternatively spliced transcripts encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC1239 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atggctactg gaggacgacg aggagctgcg gctgctccgc tgctggtggc
 501  ggtggctgcg ctgctactgg gcgctgctgg ccacctgtac cccggagagg tgtgtcccgg catggatatc cggaacaacc tcactaggtt gcatgagctg
 601  gagaattgct ctgtcatcga aggacacttg cagatactct tgatgttcaa aacgaggccc gaagatttcc gagacctcag tttccccaaa ctcatcatga
 701  tcactgatta cttgctgctc ttccgggtct atgggctcga gagcctgaag gacctgttcc ccaacctcac ggtcatccgg ggatcacgac tgttctttaa
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 901  gagctctgtt acttggccac tatcgactgg tcccgtatct tggattccgt ggaggataat tacatcgtgt tgaacaaaga tgacaacgag gagtgtggag
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2101  tgtggttcca acagttggac ggtggtagac attgacccac ccctgaggtc caacgacccc aaatcacaga accacccagg gtggctgatg cggggtctca
2201  agccctggac ccagtatgcc atctttgtga agaccctggt caccttttcg gatgaacgcc ggacctatgg ggccaagagt gacatcattt atgtccagac
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2501  cctggtctcc accattcgag tctgaagatt ctcagaagca caaccagagt gagtatgagg attcggccgg cgaatgctgc tcctgtccaa agacagactc
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> RDC1239 Translated Insert Sequence

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 401  yalvslsffr klrlirgetl eignysfyal dnqnlrqlwd wskhnltitq gklffhynpk lclseihkme evsgtkgrqe rndialktng dqascenell
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 701  eyedsagecc scpktdsqil keleessfrk tfedylhnvv fvprktssgt gaedprpsrk rrslgdvgnv tvavptvaaf pntsstsvpt speehrpfek
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1301  vsffhseenk apeseeleme fedmenvpld rsshcqreea ggrdggsslg fkrsyeehip ythmnggkkn griltlprsn ps
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