

Product datasheet for **RC238981**

NISCH (NM_001276293) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NISCH (NM_001276293) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NISCH
Synonyms:	hIRAS; I-1; IR1; IRAS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC238981 representing NM_001276293
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGCGACCGCGCGACCTTCGGGCCGAGCGGGAAGCCGAGCCGGCCAAGGAAGCGCGCTCGTGGGCT
 CGGAGCTTGTGGACACTTATACGGTTTACATCATCCAGGTCAGTATGGCAGCCATGAGTGGACAGTAAA
 GCACCGCTACAGCGACTTCCATGACCTGCATGAAAAGCTCGTTGCAGAGAGAAAGATTGATAAAAACTCTG
 CTTCCGCCCAAAAAGATAATTGGGAAAACTCAAGAAGCTTGGTGGAGAAGAGGAGAAGGATCTGGAGG
 TCTACCTCCAGAAGCTCCTGGCTGCCTTCCTGGCGTGACCCCAAGTACTGGCCCACTTCTTGCAATTT
 TCACCTTCTATGAGATAAATGGCATCACCGCGGCACTGGCTGAAGAGCTCTTTGAGAAAGGAGAAGAGCTC
 CTGGGGGCGCGGAGGTCTTGGCATTGGACCCCTGCAGCTGTATGCCGTACGGAGCAGCTGCAGCAGG
 GAAAGCCACGTGCGCCAGTGGGATGCCAAGACCGACCTCGGGCACATCCTGGACTTCACCTGTCGCT
 TAAGTACCTTAAGTTTTCTGGCAGAGAAGGACCTTTTGGGACCAGCAACATTCAGGAGCAGCTCCTGCCG
 TTCGACCTATCAATATCAAGTCCCTGCATCAGGTGGAGATAAGTCACTGTGATGCTAAGCACATCAGAG
 GGCTGGTCGCATCGAAGCCACCTTAGCCACGCTGAGTGTCCGCTTCTCAGCAACCTCGATGAAGGAAGT
 CTTGTTCTGAAGCCTCAGAAATTTGATGAGTGGGAGCCTGAAGGCACAACCTAGAAGGCCCTGTGACT
 GCCGTCATCCCCACTTGGCAGGCATTGACCACGCTTGACCTGAGCCACAACAGCATCTCCGAGATCGACG
 AGTCTGTGAAACTGATCCCAAAGATTGAGTTCTTGACCTGAGTCACAATGGATTGCTGGTTGTGGACAA
 TCTGCAGCACCTGTATAACCTTGTGCATCTGGACCTGTCTACAACAAGCTCTCCTCCTTGAAGGGCT
 CACACCAAGCTGGGGAACATCAAGACCTTAAACCTGGCAGGCAACCTCCTAGAGAGTCTGAGTGGCTGC
 ACAAGCTCTACTACTGGTCAACCTGGATCTCCGGGACAACAGGATCGAACAGATGGAGGAGGTCGGGAG
 CATAGGCAGCCTCCCGTGTCTGGAGCAGTGTCTCTGCTGAACAACCTCTGAGCATCATCCCCGACTAC
 CGGACCAAGGTGCTGGCTCAGTTCGGAGAGAGGGCCTCAGAGGTCTGTCTGGATGACACAGTGACCACAG
 AGAAGGAGCTGGACACTGTGAAGTGTGAAAGCAATTCAGAAAGCCAAGGAGGTCAAGTCCAAACTGAG
 CAACCCAGAGAAGAAGGGTGGTGAAGACTCCCGGCTCTCAGCTGCCCCCTGCATCAGACCCAGCAGCTCC
 CCTCCCACTGTGGCTCCCGCATCTGCCTCCCTGCCCCAGCCATCCTCTCTAACCAAGGTAATCGTGTAT
 GTATCTTGCTTCTAGTGGAGCCACACAGCCCTGCCTGGGCCCCCTGGCTGGGCTGGGGTGGGGAGAGG
 TGCCAGCACCTGCTTCCAACAGGTCAGACACAGGGAGGCGAGTGCCTTCTGCAGGCTGGTCTCGCGGG
 GGGACACATGGCAGGGTGCCTGCCTGATGCCAGCTGTTGCTTGCTTGGTGAGGACTCCCAATTGCTC

ACGCGTACGCGGCGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238981 representing NM_001276293
 Red=Cloning site Green=Tags(s)

MATARTFGPEREAEPKAEARVVGSELVDYTYVYIIQVTDGSHEWTVKHYRSDFDLHEKLVAERKIDKNL
 LPPKKIIGKNSRSLVEKREKDLVYLQKLLAAFPVTPRVLAHFLHFHFYEINGITAALAEELFEKGEQL
 LGAGEVFAIGPLQLYAVTEQLQQGKPTCASGDAKTDLGHILDFTCRLKYLKVSGETGPFGTSTNIQEQLLP
 FDLISFKSLHQVEISHCDAKHIRGLVASKPTLATLSVRFSATSMKEVLVPEASEFDEWEPEGTTLEGPVT
 AVIPTWQALTTLDLSHNSISEIDESVKLIPKIEFLDLSHNGLLVVDNLQHLNVLVHLDLSYNKLSLEGL
 HTKLGNIKTLNLAGNLLSLSGLHKL YSLVNLDLRDNRIEQMEEVRSIGSLPCLEHVSLNPLSIIPDY
 RTKVLAQFGERASEVCLDDTVTTEKELDTVEVLKAIQKAKEVKSKLSNPEKKGGEDSRLSAAPCIRPSS
 PPTVAPASASLPQILSNQGNRVCILLVEPHSPAWAPWLGWGWGRGASTCFQQGQTQGGQCLLQAGPRG
 GTHGRGAWPDASCCLLGEDSQLL

TRTRPLE**QKLISEEDLA**AND**ILDYKDDDDKV**

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001276293

ORF Size: 1749 bp

OTI Disclaimer: 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001276293.1](#), [NP_001263222.1](#)

RefSeq Size: 3289 bp

RefSeq ORF: 1752 bp

Locus ID: 11188

UniProt ID: [Q9Y2I1](#)

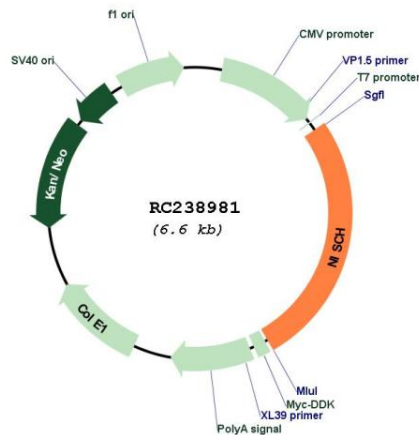
Cytogenetics: 3p21.1

Protein Families: Druggable Genome

MW: 64.5 kDa

Gene Summary: This gene encodes a nonadrenergic imidazoline-1 receptor protein that localizes to the cytosol and anchors to the inner layer of the plasma membrane. The orthologous mouse protein has been shown to influence cytoskeletal organization and cell migration by binding to alpha-5-beta-1 integrin. In humans, this protein has been shown to bind to the adapter insulin receptor substrate 4 (IRS4) to mediate translocation of alpha-5 integrin from the cell membrane to endosomes. Expression of this protein was reduced in human breast cancers while its overexpression reduced tumor growth and metastasis; possibly by limiting the expression of alpha-5 integrin. In human cardiac tissue, this gene was found to affect cell growth and death while in neural tissue it affected neuronal growth and differentiation. Alternative splicing results in multiple transcript variants encoding different isoforms. Some isoforms lack the expected C-terminal domains of a functional imidazoline receptor. [provided by RefSeq, Jan 2013]

Product images:



Circular map for RC238981