

## Product datasheet for **RG238666**

### **NISCH (NM\_001276294) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NISCH (NM_001276294) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NISCH
Synonyms:	hIRAS; I-1; IR1; IRAS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG238666 representing NM\_001276294.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGCGACCGCGCACCTTCGGGCCGAGCGGGAAGCCGAGCCGGCCAAGGAAGCGCGCGTCGTGGGC
TCGGAGCTTGTGGACACTTATACGGTTTACATCATCCAGGTCAGTGCAGCCATGAGTGGACAGTA
AAGCACCGCTACAGCGACTTCCATGACCTGCATGAAAAGCTCGTTGCAGAGAGAAAGATTGATAAAAAT
CTGCTTCCGCCAAAAAGATAATTGGGAAAAACTCAAGAAGCTTGGTGGAGAAGAGGGAGAAGGATCTG
GAGGTCTACCTCCAGAAGCTCCTGGCTGCCTTCCCTGGCGTGACCCCGAGTACTGGCCCACTTCTTG
CATTTTCACTTCTATGAGATAAATGGCATCACCGCGCACTGGCTGAAGAGCTCTTTGAGAAAGGAGAA
CAGCTCCTGGGGCCGGCGAGGTCTTTGCCATTGGACCCCTGCAGCTGTATGCCGTACGGAGCAGCTG
CAGCAGGAAAGCCACGTGCGCCAGTGGGATGCCAAGACCGACCTCGGGCACATCCTGGACTTCACC
TGTCGCCTTAAGTACCTAAGGTTTCTGGCACAGAAGGACCTTTTGGACAGCAACATTCAGGAGCAG
CTCCTGCCGTTTCGACCTATCAATATTCAAGTCCCTGCATCAGGTGGAGATAAGTCACTGTGATGCTAAG
CACATCAGAGGGCTGGTGCATCGAAGCCACCTTAGCCACGCTGAGTGTCCGCTTCTCAGCAACCTCG
ATGAAGGAAGTCCTTGTTCCTGAAGCCTCAGAATTTGATGAGTGGGAGCCTGAAGGCACAACCTAGAA
GGCCCTGTGACTGCCGTATCCCACTTGGCAGGCATTGACCACGCTTGACCTGAGCCACAACAGCATC
TCCGAGATCGACGAGTCTGTGAAACTGATCCCAAAGATTGAGTTCCTGGACCTGAGTCACAATGGATTG
CTGTTTGTGGACAATCTGCAGCACCTGTATAACCTTGTGCATCTGGACCTGTCTACAACAAGCTCTCC
TCCTTGAAGGGCTTACACCAAGCTGGGAACATCAAGACCTTAAACCTGGCAGGCAACCTCCTAGAG
AGTCTGAGTGGCTGCACAAGCTTACTCACTGGTCAACCTGGATCTCCGGGACAACAGGATCGAACAG
ATGGAGGAGTCCGGAGCATAGGCAGCTCCCGTGTCTGGAGCAGTGTCTCTGCTGAACAACCTCCTG
AGCATCATCCCCGACTACCGACCAAGGTGCTGGCTCAGTTCGGAGAGAGGGCCTCAGAGGTCTGTCTG
GATGACACAGTGACCACAGAGAAGGAGCTGGACACTGTGGAAGTCTGAAAGCAATTCAGAAAGCCAAG
GAGGTCAAGTCCAACTGAGCAACCCAGAGAAGAAGGGTGGTGAAGACTCCCGGCTCTCAGCTGCCCCC
TGCATCAGACCCAGCAGCTCCCCTCCCCTGTGGCTCCCGCATCTGCCTCCCTGCCCCAGCCATCCTC
TCTAACCAAGGCATCCTCGGAGATGAG
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAAAC
```

**Protein Sequence:**

>Peptide sequence encoded by RG238666  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MATARTFGPEREAEPKAEARVVGSELVDTYTVYIIQVTDGSHEWTVKHRYSDFHDLHEKLVAERKIDKN
LLPPKKIIGKNSRSLVEKREKDEVLQKLLAAFPGVTPRVLAHFLHFHFYEINGITAALAEELFEKGE
QLLGAGEVFAIGPLQLYAVTEQLQQGKPTCASGDAKTDLGHILDFTCRLKYLKVSGETGPFGTSNIQEQ
LLPFDLSIFKSLHQVEISHCDAKHIRGLVASKPTLATLSVRFSATSMKEVLVPEASEFDEWEPEGTTLE
GPVTAIPTWQALTTLDLSHNSISEIDESVKLIPKIEFLDLSHNGLLVVDNLQHLYNLVHLDL SYNKLS
SLEGLHTKLGNIKTLNLAGNLESLSGLHKL YSLVNLDLRDNRIEQMEEVRSIGSLPCLEHVSLLNPL
SIIPDYRTKVL AQFGERASEVCLDDTVTTEKELDTVEVLKAIQKAKEVSKLSNPEKKGEDSRLSAAAP
CIRPSSSPPTVAPASASLPQPILSNQGILGDE
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001276294

**ORF Size:** 1545 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).

**RefSeq:** [NM\\_001276294.1](#), [NP\\_001263223.1](#)

**RefSeq Size:** 2706 bp

**RefSeq ORF:** 1548 bp

**Locus ID:** 11188

**UniProt ID:** [Q9Y211](#)

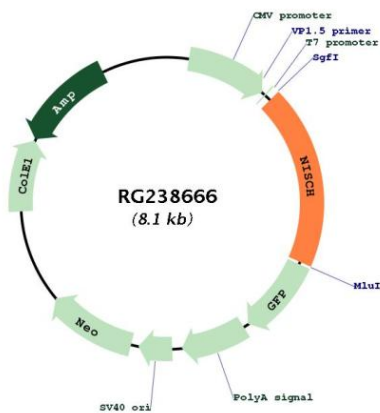
**Cytogenetics:** 3p21.1

**Protein Families:** Druggable Genome

**MW:** 57.3 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 RG238666