

## Product datasheet for **RG230189**

### **ISYNA1 (NM\_001170938) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ISYNA1 (NM_001170938) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ISYNA1
Synonyms:	INO1; INOS; IPS; IPS-1; IPS 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230189 representing NM\_001170938  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGGCCGCCCGCCAGTTCCTCGTCGAGAGCCCGACGTGGTCTACGGCCCCGAGCCATCGAGGCGC  
 AATACGAGTACCGGACGACGCGCGTCAGCCGCGAGGGTGGCGTTCCTCAAGGAGGCCAACTACTACGGCTC  
 GCTGACTCAGGCGGACCGTGAGCCTGGGCTGGACGCCGAGGCCAGGAGGTGTTCTGTACCCCTCAGC  
 GCGGTGCTGCCATGGTGGCGCCCAACGACCTCGTGTTCGATGGCTGGGACATCTCGTCGCTGAACCTGG  
 CCGAGGCGATGCGGCGCGAAGGTGCTGGACTGGGGCTGCAGGAGCAACTGTGGCCGCACATGGAGGC  
 CCTGCGGCCCGGCTTCTGTTTACATCCCGAATTCATCGCGGCCAACCCAGAGCGCGCGCGGACAAC  
 CTCATCCAGGCTCGCGTGCAGCAGCTGGAGCAGATCCGAGGACATCCGAGACTTCCGGTCTAGCG  
 CGGGCTGGACAAAGTCATAGTGTGTGGACGGCGAACACGGAGCGCTTCTGTGAGGTGATTCCAGGCTT  
 CAACGACACAGCCGAGAACCCTGTGCGCACCATGAGCTCGGTCTGGAGGTGTCGCCCTCCAGCTCTTC  
 GCCGTGGCCAGCATCCTGGAGGGCTGTGCCTTCTCAATGGGTCTCCGACAGAACCCCTGGTGCCGGAG  
 CTCTTGAGCTCGCGTGGCAGCACCGGGTTTTGTGGCGGAGATGACTTCAAGTCAGGCCAGACCAAGT  
 CAAGTCCGTGCTTGTGGACTTCCTATTGGCTCCGGCCTCAAGACCATGTCCATCGTGAGTTACAACCAC  
 CTGGGCAACAACGATGGGAGAACCTATCGGCGCCATTGCAGTCCGCTTAAGGAGGTGTCCAAGAGCA  
 ACGTGGTGAGCAGACATGGTGACAGCAACCCAGTGTCTATACGCCCGCGGAAGAGCCTGACCACTGCGT  
 GGTCATCAAGTATGTGCCGTACGTGGGTGACAGCAAGCGCGCGTGGATGAGTATACCTCGGAGCTGATG  
 CTGGGCGGAACCAACACTGGTGTGCACAACCGTGTGAGGACTCGTGTGGCCGACCCATCATGC  
 TGGACCTAGCGCTGTGACCGAGCTGTGCCAGCGCGTGTCTGACCTGACATGGACCCCGAGCCGCGC  
 GACCTTCCACCCGTGCTGCTCCCTGTCTAGCTTCTTCAAGGCGCCACTAGTGCCCGCCGCGAGCCCG  
 GTGGTCAATGCGTTTTCCGCCAGCGCAGCTGCATCGAGAACATCCTCAGGCGCTGCGTGGGGCTCCCGC  
 CACAGAACCACATGCTCCTGGAACACAAAATGGAGCGCCAGGGCCAGCCTCAAGCGAGTTGGACCCGT  
 GGCTGCCACCTACCCTATGTTGAACAAGAAAGGACCGGTACCCGCTGCCACCAATGGCTGCACCGGTGAT  
 GCCAATGGGCATCTGCAAGAGGAGCCCCAATGCCACCACC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG230189 representing NM\_001170938  
 Red=Cloning site Green=Tags(s)

MEAAAQFFVESPDVYGPPEAIEAQYEYRTRVRSREGGVLKEANYGSLTQAGTVSLGLDAEQEVEVPFVS  
 AVLPMVAPNDLVFDGWDISSLNLAEMRRAKVLDWGLQEQLWPHMEALRPRPSVYIPEFIAANQSARADN  
 LIPGSRAQQLQIRRDIRDFRSSAGLDKVIWLWTANTERFCEVIPGLNDTAENLLRTIELGLEVSPSTLF  
 AVASILEGCAFLNGSPQNTLVPGALELAWQHRVVFVGDDFKSGQTKVKSVLVDFLIGSLKTMISVSYNH  
 LGNNDGENLSAPLQFRSKEVSKSNVDDMVQSNPVLVYTPGEEDHCVVIKYVPYVYVGDVSKRALDEYSEL  
 LGGTNTLVLHNTCEDSLAAPIMLDLALLTELQQRVFSCTDMDPEPQTFHPVLSLLSFLFKAPLVPPGSP  
 VVNALFRQRSCIENILRACVGLPPQNHLLEHKMERPGPSLKRVPVAATYPMLNKKGPVPAATNGCTGD  
 ANGHLQEPPMPTT

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001170938

**ORF Size:** 1512 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.

**RefSeq:** [NM\\_001170938.2](#)

**RefSeq Size:** 2265 bp

**RefSeq ORF:** 1515 bp

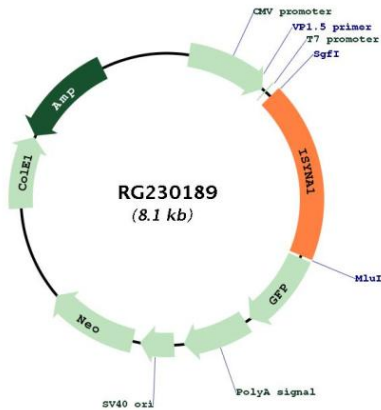
**Locus ID:** 51477

**UniProt ID:** [Q9NPH2](#)

**Cytogenetics:** 19p13.11

Protein Families:	Druggable Genome
Protein Pathways:	Inositol phosphate metabolism, Metabolic pathways
Gene Summary:	This gene encodes an inositol-3-phosphate synthase enzyme. The encoded protein plays a critical role in the myo-inositol biosynthesis pathway by catalyzing the rate-limiting conversion of glucose 6-phosphate to myoinositol 1-phosphate. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the short arm of chromosome 4. [provided by RefSeq, Nov 2011]

### Product images:



Circular map for RG230189