

Product datasheet for **RG204087**

TIGAR (NM_020375) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TIGAR (NM_020375) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TIGAR
Synonyms:	C12orf5; FR2BP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204087 representing NM_020375 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCGCTTCGCTCTGACTGTTGTCCGGCATGGAGAAACAAGATTTAACAAGGAGAAAATAATCCAAG
 GACAAGGAGTAGATGAACCTCTTCAGAACTGGATTTAAACAAGCAGCAGCTGCTGGTATATTTCTGAA
 TAATGTGAAGTTTACTCATGCTTTCTCCAGTGATCTCATGAGGACAAAGCAGACCATGCATGGAATTTG
 GAGAGAAGCAAATTTTGCAAAGATATGACGGTAAAGTATGACTCAAGACTTCGGGAAAGGAAATACGGGG
 TTGTAGAAGGCAAAGCGCTAAGTGAGCTGAGGGCCATGGCCAAAGCAGCCAGGGAAGAGTGCCCTGTGTT
 TACACCGCCCGGAGGAGAGACGCTGGACCAGGTGAAAATGCGTGGAATAGACTTTTTTGAATTTCTTTGT
 CAACTAATCCTGAAAGAAGCGGATCAAAAAGAAGTTCCTCCCAAGGATCTCCAAGCAACTGTCTGGAAA
 CTTCTTTGGCAGAGATATTTCTTTAGGAAAAAATCACAGCTCTAAAGTTAATTCAGACAGCGGTATTCC
 AGGATTAGCAGCCAGTGTCTTAGTTGTGAGTCACGGTGCTTACATGAGAAGTCTGTTTGATTATTTCTG
 ACTGACCTTAAGTGTTCTTACCAGCCACTCTGAGCAGATCTGAACCTATGTGAGTCACTCCCAATACAG
 GGATGAGTCTCTTATCATAAACTTTGAGGAAGGAAGAGAAGTTAAACCAACGGTTCAGTGTATTTGTAT
 GAACCTACAGGATCATCTAAATGGACTGACTGAAACTCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG204087 representing NM_020375
 Red=Cloning site Green=Tags(s)

MARFALTVVRHGETRFNKEKIIQGGVDEPLSETGFKQAAAAGIFLNNVKFTHAFSSDLMRKTQTMHGIL
 ERSKFCKDMTVKYDSRLRERKYGVVEGKALSELAMAKAAREECPVFTPPGGETLDQVKMRGIDFFEFLLC
 QLILKEADQKEQFSQGGSPSNCLTSLAEIFPLGKNHSSKVNDSGIPGLAASVLVYSHGAYMRS�FDYFL
 TDLKCSLPATLSRSELMSTPNTGMSLFIFNFEEGREVKPTVQCICMNLQDHLNGLTETR

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020375

ORF Size: 810 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_020375.3](#)

RefSeq Size: 8237 bp

RefSeq ORF: 813 bp

Locus ID: 57103

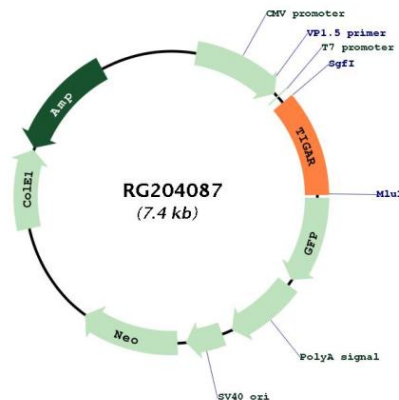
UniProt ID: [Q9NQ88](#)

Cytogenetics: 12p13.32

Domains: PGAM

Gene Summary: This gene is regulated as part of the p53 tumor suppressor pathway and encodes a protein with sequence similarity to the bisphosphate domain of the glycolytic enzyme that degrades fructose-2,6-bisphosphate. The protein functions by blocking glycolysis and directing the pathway into the pentose phosphate shunt. Expression of this protein also protects cells from DNA damaging reactive oxygen species and provides some protection from DNA damage-induced apoptosis. The 12p13.32 region that includes this gene is paralogous to the 11q13.3 region. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG204087