

Product datasheet for **MG207428**

Riox2 (NM_025910) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Riox2 (NM_025910) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Riox2
Synonyms:	1810047J07Rik; 2410057H13Rik; 3830408E23Rik; AI449204
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207428 representing NM_025910
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAAAGAAAGTGCAGCCACAGGGGATGAGAACAAGAAGAGTCTGTTCTTCAAGCGGGTGAAGG
 AGGAGCTGCTGAAACGCTTTCTGTATTAACCTTTGACAGCCCCAGTAGTTTCTTCGAAAGTTAATCTC
 ACCCATCAAAGTAGAGACTTTTTTCAAGGAATTCTGGGAACAAAAGCCCCTTCTCATTGAGAGGATGAC
 CCTGTACTGGCCAAATATTACAGTCTCTGTTGAGCCTCTCAGATCTGAAGAGACTCTGCAAGAAAGGAG
 TGTACTATGGAAGAGACGTGAATGTCTGCCGAGCATCAGTGGGAAGAAGAAGGTTTTAAATAAGGATGG
 CAGAGCACATTTTCTCAGCTGAGAAAAGATTTTGATCAGAAGAGGGCAACAATTCAGTTTCACCAACCT
 CAGAGATATAAGGATGAGCTGTGCCGATCCAGGAAAAGCTGGAATGTTACTTTGGGTCTTAGTAGGCT
 CGAATGTGTACATGACTCTGCAGGATCTCAGGCGCTCCCTCCACATTATGATGATGTTGAGGTTTTAT
 CCTGCAGCTGGAGGGAACGAAACACTGGCGCCTGTACTCCCCAACTGTGCCCTGGCACACGAGTACAGT
 GTGGAATCTGAGGACCGGATCGGCACACCGACACAGACTTCCTGCTGAAGCCTGGAGATTGTTGTACT
 TTCCCAGAGGGACCATTATCAGGCAGAACTCCTTCAGGCTGGCCTACTCTATTACCTGACTATTAG
 CACCTACCAGAACAATTCATGGGAGACTGCCTTTTGGATTCCATTTTCGGGGTTCGATTGACATTGCA
 AAGGAAGATGTGGCATTAAAGGAGTGAATGCCCGCGGATGCTCCTGAATGTGGAACCCAGCTGATG
 TAACAAGGAAGTTGAGTGGCTTTCTGAGGACTCTTGACAGACAGCTCGAGGGCAGAGAAGAGCTGCTGTC
 ATCAGATATGAAGAAGGACTTCGTCAGCACAGACTCCCTCCTTTCTTCGAGGGAATGGAACGGAGACG
 ATGGACCCAGGTAAACAGTTGCCAAGTTGGACAACATAATAAGACTGCAGTTCAAAGATCACATTGTCC
 TCACAGTAGGGCCAGATAAGAATCCATTTGATGAAGCTCAACAAAAGTGTTTACATCTATCATTCTCT
 GAAGAATGTGAGGCAGATGCACATGATAGGAGAAGAGGAGGAATCCGAGATTTTCGGTCTTCGCTTTCTCT
 TTATCACATGTGGATGCTCTGAAGCAAATCTGGTGCGGGTCACCAATTCGTGTTAAGGAACTGAAACTTG
 ACACAGATGAAGAAAAGGAGAACCTGGCACTGTCTCTCTGGTCGGAGTCTTAATCCAAGTACTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207428 representing NM_025910
 Red=Cloning site Green=Tags(s)

MPKKVQPTGDENEEESVPCKRVKEELPETLSVLNFDSPSSFFESLISPIKVETFFKEFWQKPLLIQRDD
 PVLAKYYQSLFSLSDLKRLCKKGVYVGRDYNVCRSISGKKKVLNKDGRAHFLQLRKDFDQKRATIQFHQP
 QRYKDELWRIQEKLECYFGSLVGSNVYMTAGSQGLPPHYDDVEVFILQLEGTKHWRLYSPTVPLAHEYS
 VESEDRIPTHTDFLLKPGDLLYFPRGTIHAETPSGLAYSIHLTISTYQNNSWGDCLLDSISGFVFDIA
 KEDVALRSGMPRRMLLNVEPADVTRKLSGFLRTLADQLEGREELLSSDMKKDFVKHRLPPFFEGNGTET
 MDPGKQLPRLDNIIRLQFKDHIVLTVGPDKNPFDEAQKVVYIYHSLKNVRQMHMIGEEEESEIFGLRFP
 LSHVDALKQIWCSPIRVKELKLDTDEEKENLALSLWSESLIQVL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_025910

ORF Size: 1395 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_025910.2](#), [NP_080186.2](#)

RefSeq Size: 2159 bp

RefSeq ORF: 1398 bp

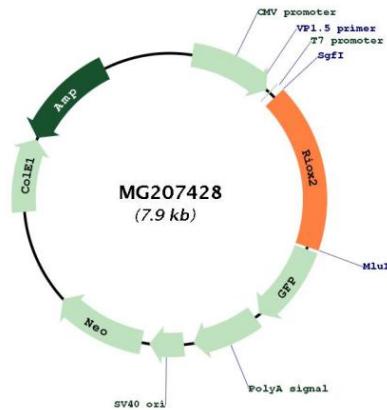
Locus ID: 67014

UniProt ID: [Q8CD15](#)

Cytogenetics: 16 C1.3

Gene Summary: Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase. Is involved in the demethylation of trimethylated 'Lys-9' on histone H3 (H3K9me3), leading to an increase in ribosomal RNA expression. Also catalyzes the hydroxylation of 60S ribosomal protein L27a on 'His-39' (By similarity). May play an important role in cell growth and survival. May be involved in ribosome biogenesis, most likely during the assembly process of pre-ribosomal particles.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207428