

Product datasheet for **MC219541**

Riox1 (NM_023633) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Riox1 (NM_023633) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Riox1
Synonyms:	2410016O06Rik; MAPJD; NO66
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >MC219541 representing NM_023633
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACGAGCTACCGAATGGCAACGGTGCGGCGTCTGAAGCGCGGGCGGGGAGCGCCGGCGGCACC
 CGCAGTCGCAGCCCCGCGCGCGTGGTCTTGGCCCTGCCCTTGCGGCCCCGGAAGATCCGAAGGCACCG
 GAAAAGTGCGGCGCGTCCCGCGTGGCCGCGTGAAGACTCGCGCGCTCCGGAGCGAGGACTCGGACTCG
 AAAGTGGCGGTGGCTCGGTTTCGGGCAAGCGGAAGAGGCGGCAGAGCTGCTGGAGGCCTCGGGTTCGG
 CGGAGCCGCGCCGGTGTGAGCGCGCCGAGGTCGGCTTCGGGACGCTGCCGAGCCGCGTGGAGGGATG
 GGCTGCGCTCTCCGGAACCTGGGGACGGCCGCTCCGCCGCCCGGGCTCGCACGGATGAGCCGGGG
 CGACCCCGGGCTTCGCCGCTGCAGCAGGTAAGTACGCGAGCTGAACGGCATCCCCAGCAGCCGGAGGCGG
 CCGCCCGCTCTCGAGTGGCTCTGGCGCCCTGCCCGCCGACCTTCTACCGCGGCTGTGGGAGCG
 GGAGGCGGTGCTGGTGCGGCGGACGACCGCAGCTACTACGAGGGTCTCTTCTCCACCGCCGACCTGGAC
 TCGATGCTGCGCTACGAGGACGTGCAATTCGGGACGATCTGGACGCCGCGCGCTACGTCGATGGACGGC
 GGGAGACCTTGAACCCGCGGGCCGCGCGCTTCCCGCCGCGCGTGGTCTTGTACCGAGCCGGCTGCTC
 CTTGCGCCTCTGTGCCCAAGCCTTCTCGCCACCCTGTGGCAGTTTCTGGCCGTGCTCCAGGAGCAG
 TTTGGCAGCATGGCGGGCTCCAACGTCTACCTACGCCCCCGGACTCGCAGGGCTTTGCTCCTCACTACG
 ATGACATCGAGGCTTTCGTGTTGCAGCTGGAAGGTCGAAACTCTGGCGCGTCTACCGACCGGGACCC
 GAGTGAGGAGTTGGCCCTGACATCTAGTCCCAACTCAGCCAGGAGGACCTTGGTGGAGCTGTGCTGCAA
 ACGGTACTGGAACCTGGAGACCTGCTCTATTTTCTCGGGGCTTATTACCAAGCTGAATGTCAGGATG
 GAGTCCACTCCCTACACCTCACCTGTCCACCTACCAGCGCAATACATGGGGTGACTTCTGGAGGCTGT
 ACTGCCTCTGGCAGTGCAAGCGGCCATAGAGGAGAAGCTGGAGTTCCGCAGAGGCTTGGCCGAGACTTC
 ATGGATTACATGGGGCCAGCATTCCGACTCTAAGGATCCTAGAAGGACAGCTTTCATGAAAAAGTGC
 GGGTCTTGGTTGCTCGCCTGGGACACTTGTCTCTGTCGATGCTGTGGCTGACCAGAGAGCAAAGACTT
 CATTACGATTCCCTGCCCTGTGTTGACCGATAGGGAACGGGCTCTAAGTGTTCACGGCTCCAGTT
 CGCTGGGAGGCTGGAGAACCCGTCAATGTGGGGGCCAGCTGACAACGAAACCAAGTCCACATGCTTC
 AGGACGGCGTAGCTCGGCTGGTGGGAGAGGAGGCGGATTGTTCTGTATCACACGGTGGAAAACCTCG
 AGTTTATCACCTAGAGGAACCAAGTGTAGAAATCCACCCAGCAAGCCGACCCATGGAACCTTGT
 CTTGCTCCTACCGGAGTTTGTGAGAGTGGGGGACTTGCCATGTGACAGTGTGGAAGACCAGCTCTCT
 TGCAACCATGTTATATGATAAGGGGCTGCTACTACCAAGACACCTCTAGTTCGGAGT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_023633
- Insert Size:** 1812 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_023633.3](#), [NP_076122.2](#)

RefSeq Size: 2346 bp

RefSeq ORF: 1812 bp

Locus ID: 71952

UniProt ID: [Q9JIF3](#)

Cytogenetics: 12 D1

Gene Summary: Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase Also catalyzes the hydroxylation of 60S ribosomal protein L8 on 'His-216'. Acts as a regulator of osteoblast differentiation via its interaction with SP7/OSX by demethylating H3K4me and H3K36me, thereby inhibiting SP7/OSX-mediated promoter activation. May also play a role in ribosome biogenesis and in the replication or remodeling of certain heterochromatic region. Participates in MYC-induced transcriptional activation (By similarity). Specifically demethylates 'Lys-4' (H3K4me) and 'Lys-36' (H3K36me) of histone H3, thereby playing a central role in histone code. Preferentially demethylates trimethylated H3 'Lys-4' (H3K4me3) and monomethylated H3 'Lys-4' (H3K4me1) residues, while it has weaker activity for dimethylated H3 'Lys-36' (H3K36me2).[UniProtKB/Swiss-Prot Function]