

Product datasheet for **MC224909**

Ubr2 (NM_001177374) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ubr2 (NM_001177374) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ubr2
Synonyms:	9930021A08Rik; AI462103; AW540746; E130209G04Rik; ENSMUSG00000043296; mKIAA0349
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224909 representing NM_001177374 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGGCGTCGGAGATGGAGCCCGAGGTGCAGGCCATCGACCGCAGTTTGCTGGAATGTTCTGCCGAAGAGA
TCGCAGGGAGATGGCTGCAAGCAACCGACCTCAACAGAGAAGTGTACCAGCATTAGCCCACTGTGTGCC
CAAATCTACTGCCGGGGCCCTAACCCCTCCCTCAGAAGGAAGACACGCTGGCACAGCAGCATCTGCTG
GGACCGATGGAGTGGTACATCTGCGCTGAAGACCCTGCGCTGGGATTTCCAAAGCTCGAGCAGGCAACA
AGCCTTCTCACCTCTGTGGCCGAGTGTTAAAGTGGGGGAACCTACATACTCCTGCAGAGACTGTGCAGT
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ACCACATCGGGAGGAGGGGGCTTCTGTGACTGTGGTGCAGACTGAGGCGTGGAAAGAGGGACCTTACTGCC
AGAAGCACAAGCTCAGCAGCTCTGAAGTTGTGGAGGAGGAGGATCCTCTTGTGCATCTATCAGAAGATGT
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TGCAGGGAATGGACCCGATCACGCGTCAGGTGGGACAGCACATTGAGATGGAGCCAGAGTGGGAAGCAGC
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 AGTGTTCATCCAGCAGCCCTGTGGCCGAGGCGGAGGGAACCATAAAGGAGAGAGCTCAAGAGACAAGGA
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 CTGTGGCAGCTTATGCATGCCATTGTTGGCAAAGGTATTTGATTCCGTTCAAGCCAAGGAGCAGCGA
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 ATTTGGAACGGCTGCTTACAAGGTGGGACTGAAGGTTATCCTAATGAAGGTGACCCCGTGTGCCCATC
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 AGCTATGAAGACCTCCCGTGCATAGACATGACATGTTTCACTTGTGGTGGGCTGGTGCCTGCTGCTT
 TCCCAGCTCTGCAGTGTGAGATTTTTTCAAGGAAGCAGCCTGGCCACTGGGGACCTGCACATCTTCCACTT
 GGTACCATGGCACACATCGTACAGATCTTACTTACCTCATGTACAGAAGAGAATGGCATGGATCAAGAG
 AATCCCACTGGGGAAGAAGAAGTGGCCATTCTCTTTTGCACAAAACACTTACCAGTATACTGGAAGTG
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 GTGACATCATGAACTCCCTGATTGAAAGTTGGTCCAGAACAGTGAAGTTAAACGGTATCTAAATGGCGA
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 ATTAACCAAGCATCCAATTTCTCGTGCCCAAATCAGGTGGCGACAAGAGCAGAGCTCCTACTCTGTGCC
 TCGTGTGTGGGAGTCTCCTCTGCTCTCAGAGTTACTGCTGCCAAGCTGAGCTGGAGGGTGAAGACGTCGG
 AGCCTGCACAGCACACCTACTCCTGCGGCTCCGGGGCCGGCATCTTCTGAGAGTGGCGGAATGTCAG
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 CCGACCAGGGACTCAGACGAGGAAATCCTTTACATTTATGCCAAGAGCGGTTTCGAAAGATCCAGAAGCT

CTGGCAGCAGCATAGTATCACAGAGGAGATCGGACACGCGCAGGAGGCTAACAGACCCTGGTCGGAATT
GACTGGCAGCATTATAA

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII

ACCN: NM_001177374

Insert Size: 5268 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_001177374.1](#), [NP_001170845.1](#)

RefSeq Size: 7696 bp

RefSeq ORF: 5268 bp

Locus ID: 224826

UniProt ID: [Q6WKZ8](#)

Cytogenetics: 17 C

Gene Summary:

E3 ubiquitin-protein ligase which is a component of the N-end rule pathway. Recognizes and binds to proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation. Plays a critical role in chromatin inactivation and chromosome-wide transcriptional silencing during meiosis via ubiquitination of histone H2A. Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth (By similarity). Required for spermatogenesis, promotes, with Tex19.1, SPO11-dependent recombination foci to accumulate and drive robust homologous chromosome synapsis (PubMed:28708824). Polyubiquitinates LINE-1 retrotransposon encoded, LIRE1, which induces degradation, inhibiting LINE-1 retransposon mobilization (PubMed:28806172).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) uses an alternative exon in the central coding region, compared to variant 1. The resulting isoform (2) is the same length but differs at an internal segment, compared to isoform 1.