

## Product datasheet for **MG219537**

### Ubr2 (NM\_001177374) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ubr2 (NM\_001177374) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Ubr2  
**Synonyms:** 9930021A08Rik; AI462103; AW540746; E130209G04Rik; ENSMUSG00000043296; mKIAA0349  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG219537 representing NM\_001177374  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTCGGAGATGGAGCCCGAGGTGCAGGCCATCGACCGCAGTTTGCTGGAATGTTCTGCCGAAGAGA  
TCGCAGGGAGATGGCTGCAAGCAACCGACCTCAACAGAGAAGTGTACCAGCATTTAGCCCACTGTGTGCC  
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GAGTGGTCAGATGAGCTGAGGCAGAAGTCTTACAAGGGTTCGATGCCTTCTTGAATTACTGAAGTGCA  
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CCGACCAGGGACTCAGACGAGGAATCCTTTACATTTATGCCAAGAGCGGTTTCGAAAGATCCAGAAGCT  
CTGGCAGCAGCATAGTATCACAGAGGAGATCGGACACGCGCAGGAGGCTAACCAGACCCTGGTCGGAATT  
GACTGGCAGCATTTA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG219537 representing NM\_001177374

Red=Cloning site Green=Tags(s)

MASEMEPEVQAIDRSLLLECSAEEIAGRWLQATDLNREVVYQHLAHCVPKIYCRGPNPFPQKEDTLAQHILL  
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DQAKTVIVRNTSRQTKPLKVQVMHSSVAHQNFGLKALSWLGSVIGYSDGLRRILCQVGLQEGPDGENSS  
LVDRLMLNDSKLVK GARSVYHQLFMSSLLMDLKYKFLALRF AKNYERLQRDYVTDHHDREFSVADLSVQ  
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EWSDELQKFLQGFDAFLELLKCMQGM DPITRQVGHIEMEPEWEAAFTLQMKLTHVISMVQDWCALDEK  
VLIEAYKKCLAVLTQCHGGFTDGEQPITLSICGHSVETIRYCVSQEKVSIHLPI SRLLAGLHVLLSKSEV  
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SYEDLPCILDIDMFHLLVGLVLA FPALQCQDFSGSSLATGDLHIFHLVTMAHIVQILLTSCTEENGMDQE  
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SHFEHL CNYLSLPTNL IHLFQENSDIMNSLIESWCQNSEVKRYLNGERGAISYPRGANKLIDLPEYSSL  
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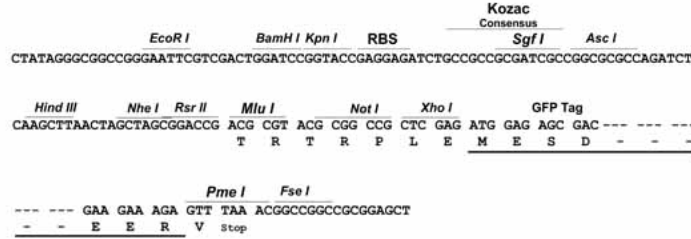
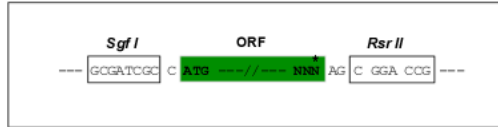
SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

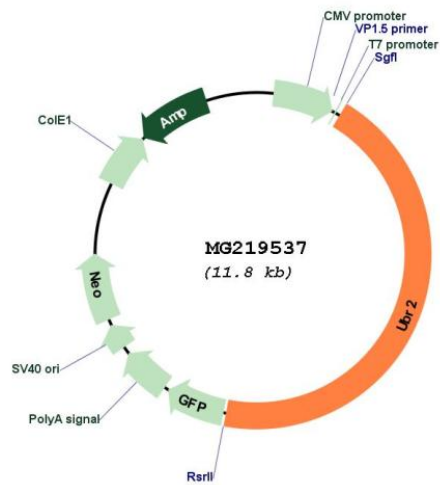
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



<b>ACCN:</b>	NM_001177374
<b>ORF Size:</b>	5265 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001177374.1</a> , <a href="#">NP_001170845.1</a>
<b>RefSeq Size:</b>	7696 bp
<b>RefSeq ORF:</b>	5268 bp
<b>Locus ID:</b>	224826
<b>UniProt ID:</b>	<a href="#">Q6WKZ8</a>
<b>Cytogenetics:</b>	17 C
<b>Gene Summary:</b>	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]