

## Product datasheet for MC207737

### Rd3 (NM\_023727) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rd3 (NM\_023727) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Rd3  
**Synonyms:** 3322402L07Rik; rd-3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >MC207737 representing NM\_023727

Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGTCCCTCATCCCGTGGCTCCGGTGAACGACACCCCTCCCCGGCTCTCGGCCCGGACCCCGGCCGAGA  
 TGGTGCTGGAGACGCTCATGATGGAGCTGGCTGGGCAGATGAGAGAGGTGGAGCGACAACAGAGGGAGCG  
 TCGCAGCGCAGTCAGGAAGATCTGCACTGGTGTGGACTACAGCTGGTTGGCAAACACGCCCAGGCCACCC  
 TATGACATCAGCCCTGGTGAAGCGCTGCAGTTGGAGGATGTATGTGCCAAGATCCACCCATCCTACTGTG  
 GGCCTGCCATCCTCAGGTTCAAGCAGCTGCTGGCTGAACGAGAGCCCGAGGTGCAGGAGGTGGCGCGGCT  
 GTTCCGCTCCGTGTTGCAGGAGGCCCTGGAGAAGATGAAGCAGGAGGAGGAGGCCCATAGCTGACACGT  
 CAGTGGAGCTTGAGGCCCGCGGCAGCCTGTCTCCTTCAAGACCCGCGCTCGCATCGCACCCCTTTGCCA  
 GTGACATCCGAACCATCTCGGAGGATGTGGAGCGCGATGCGCCACCCCGCCGCGCACCTGGAGCATGCC  
 GGAGTTCAGGGCGCCCCAGGCCGACTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_023727  
**Insert Size:** 588 bp



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<b>OTI Disclaimer:</b>	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).
<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_023727.4</a></u> , <u><a href="#">NP_076216.3</a></u>
<b>RefSeq Size:</b>	3723 bp
<b>RefSeq ORF:</b>	588 bp
<b>Locus ID:</b>	74023
<b>UniProt ID:</b>	<u><a href="#">Q8BRE0</a></u>
<b>Cytogenetics:</b>	1 97.09 cM
<b>Gene Summary:</b>	<p>Plays a critical role in the regulation of enzymes involved in nucleotide cycle in photoreceptors (PubMed:21078983, PubMed:27471269). Inhibits the basal catalytic activity and the GCAP-stimulated activity of GUCY2E and GUCY2F, two retinal guanylyl cyclases involved in the production of cGMP in photoreceptors (PubMed:27471269). Involved in the transport of GUCY2E and GUCY2F to their target sites in the photoreceptor outer segment (PubMed:21078983). Up-regulates the activity of GUK1, a kinase that plays also an essential role for recycling GMP and indirectly, cGMP (By similarity). Plays an important role for the survival of rods and cones in the retina (PubMed:8486383, PubMed:17186464).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>