

## Product datasheet for MR214512

### Nrde2 (NM\_183155) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nrde2 (NM_183155) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nrde2
Synonyms:	6720454P05Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR214512 representing NM_183155 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**GCGATCGC**C

ATGGCGCTGTTCCCGGCTTTTGC GGACGTAAGTGAGGCCTCCGGTGATGGGGCATT CAGGAAAGAGTTAG  
ATTGGCTGAGCAACCCAAGCTTTCGTGTTGAAATCTAACTTCTCTGAGCCGACAACTGAAGAGGTAC  
AGCCCTTGCTTCTGAAGGTCACCACCCCAAGGAGTCTCTGAAGTCAGAGCTCTCAGGTGAGAGCAAC  
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TGCCTACTAAAGTACAGGTGGAATTCTTTGAGCCCTTCTGGGACAGCGGAGAACCACGCCTTGGGGAGAA  
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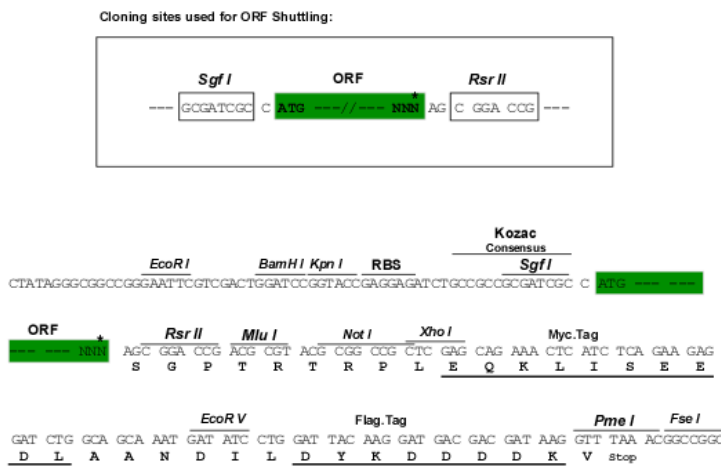
Protein Sequence: >MR214512 representing NM\_183155  
 Red=Cloning site Green=Tags(s)

MALFPAFADVSEASGDGAFRKELDWLSNPSFRVGNLTSLSRQTEEVTAASEGSPPPRSPLKSELGSESNTSEKLAQTSRKKKKKKRRKHQHHRKTKRRHEQLSSSGSESDTEAGKDRASRSIRDDQKEAKPCQGSNAAAATAAAGHRSIWLEDIHDLTDVFRDTKKPDPANWEYKSLYRDIARYKRGDSCGLINPKKQCISWEGASAARKHSHRHLERYFTKKNVGLMRTEGIAVCSNPEPASSEPVTFFIPVKDSAEATPVTSWLNPLGIYDQSTTQWLQGGPAEQESKQPDSDRENAALKARVEEFNRRVRENPDWTQLWMAFVAFQDEVMRSPGIYALGEGEQEKHRKSLKLLLEKKLAVLERAIESNPGSVELKLAQLQCSEFWEPSALAKEWQKLLFLHPNNTSLWQRYLSFCQSQFGTFSVSKLHSLYGKCLSTLSAVKDGSMLSHPVLPGTTEAMFGLFLQQCHFLRQAGHSEKVISLQFAMVDFTFKPKDSVKELPTKVQVEFFEPFWDSEPRVGEKARGWRAMHQERGGWVLTITPEDDEEPEEEDQEIKDKTLPRWQIWLAVERSRDRHWRPWRPDKTKKQTEEDCEDPERQVLFDDIGQSLIRLSSPDLQFLIQAFQFLGVPSGFLPPASCLYLAMDESSIFESELYDEKPLTYFNPSFSGISCVGSMEQLGRPRWTKGHNREGEEFVRNVFHLVPLLAGKQKSQLSLSWLRYEIAKVIWCLHTKKKRLKSGKSCCKKLANLLKEPENRNNFCLWKQYAHLEWLLGNTEDARKVFDALSMAGSSELKDRELCELSLLYAELEMELSPDSRGATTGRAVHILTRLTESSPYGPTGQVSSSTQVLKARKAYELALQDCLGQSCASSPAPAEALDCLGSLVRCFMLFQYLVGIDAAVQIYGRVFAKLKGSARLEDPGEDSTSSQSLTNVLEAVSMHTSLLRFHMNVCIYPLAPLRETLSDALKLYPGNQVLWRAVYQIQNKSHSANKTRRFDTVTRSAKHLEPWLFAIEAEKLRKLLVESVQRVGGREHVHATIPETGLTHRIRALFENAIRSDKGNQCPLLWRMYLNFLVSLGNKERSKGVFYKALQSCPWAKVL YMDAMEYFPDELQEILDVMTEKELRVRLPLEEELLED

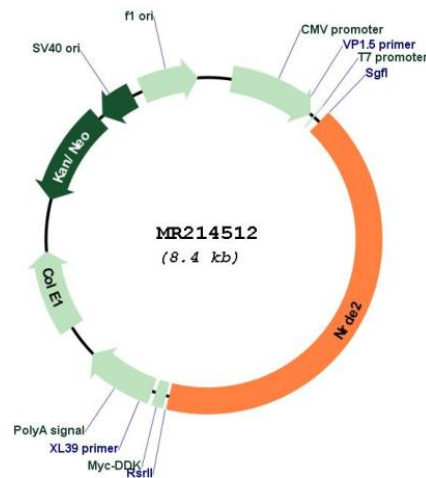
SGPTRRRLRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_183155

**ORF Size:** 3501 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.

**RefSeq:** [NM\\_183155.3](#), [NP\\_898978.2](#)

**RefSeq Size:** 3708 bp

**RefSeq ORF:** 3504 bp

**Locus ID:** 217827

**Cytogenetics:** 12 E

**MW:** 133.3 kDa

**Gene Summary:**

Protein of the nuclear speckles that regulates RNA degradation and export from the nucleus through its interaction with MTREX an essential factor directing various RNAs to exosomal degradation. Changes the conformation of MTREX, precluding its association with the nuclear exosome and interaction with proteins required for its function in RNA exosomal degradation. Negatively regulates, for instance, the degradation of mRNAs and lncRNAs by inhibiting their MTREX-mediated recruitment to nuclear exosome. By preventing the degradation of RNAs in the nucleus, it promotes their export to the cytoplasm. [UniProtKB/Swiss-Prot Function]