

Product datasheet for **RG207141**

LRWD1 (NM_152892) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	LRWD1
Synonyms:	CENP-33; ORCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG207141 representing NM_152892
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGCCCCCTCTCGGCGGGCTGCTAATGCAGCGGGCGCCCCAAGAGCGACCGGCTGGGAAGATCC
 GGAGTCTGGACCTGTCAGGATTGGAGCTGCTTTCCGAGCACCTGGACCCAAACTCCTGTGCCGCTGAC
 GCAGCTGCAGGAGCTTGACCTGTCTAACAACCACTGGAGACGCTGCCGACAACCTGGGCCTGTCCAC
 CTGCGTGTCTCCGCTGCGCCAACAACCACTGGGGGATGTTACTGCCTGTGCCAGTTCCTTCTCCTGCC
 AGGAACTCAGCCTGGAGGGCAACCCCTTCTGACGGTCAATGACAACCTGAAAGTCTCCTTCTCCTGCC
 CACGCTCCGTAAAGTCAATGGCAAGGATGCGTCTCAACTTACTCTCAGGTGGAGAACCTGAATCCGGGAG
 CTGACCAGCAGGGTCACAGCTCACTGGGAGAAGTTCATGGCCCACTGGGTCTGAAGAGGAGGCTGAGA
 AGGCCAGGCGGACTTTGTGAAGTCGGCTGTCAGGGATGTCGCTACGGGCCGAGTCCCTCAGCGAGTT
 CACCCAGTGGCGGGTGGGATGATCTCTGAGGAGCTGGTGGCCGCACTAGGACCCAGGTGCAAAAGGCT
 AACAGCCAGAGAAGCCCCAGAGCTGGAGCTGCCACAAGCCAGGGCCAGACTGGCGGCCTTGAAAC
 GGCCAGACGACGTCCCACTCAGCCTCTCTCCAGCAAGCGGGCGTGTGCCTCCCGTCGGCCAGGTGGA
 GGGCAGCCCTGTGGCAGGCTCCGATGGCAGCCAGCCTGCTGTGAAGCTGGAGCCCTGCACCTTCTGCAG
 TGCCACAGCAAGAACAACAGCCCCAGGACCTCGAGACCCAGCTGTGGCCTGTGCCTTCGAGCCGGCCT
 GGGAGGAGGGGGCCACATCCAGACCGTGGCCACGTGCGCGGGGAGGCTGTGTGCGTAATTGATTGCCA
 GACGGGCATCGTGTCCACAAGTACAAGGCACCCGGCGAGGAGTTCTTTCTGTGGCCTGGACCGCTCTG
 ATGGTGGTCACACAGGCTGGCCACAAGAAGCGCTGGAGTGTGCTGGCGGCTGCAGGCCTACGGGGCTGG
 TCCGGTGTGACGTGCGTGGCGCTTCTGCTGCGGGGTATCCGAGCCACAAGAAGGCCATCGCCAC
 CCTGTGCTTCAGCCCCGCCACGAGACCCATCTTTCACGGCTCCTATGACAAGCGGATCATCCTCTGG
 GACATCGGGGTGCCAACCAGGACTACGAATTCAGGCCAGCCAGCTGCTCACACTGGACACCACCTCTA
 TCCCCCTGCGCCTCTGCCCTGTGCGCTCTGCCCGACGCCCGCTGTGGCCGGCTGCGAGGGCGGGCTG
 CTGCTGCTGGGACGTGGGCTGGACAGCCCCAAAAGAGGAGGGTGTGTGAAGTGAATTGCTTCTCTCT
 GAGGGCTCCGAGGCATCTGGACGGAGAGTGGATGGGCTGGCATTGTGAATGAGGACATCGTGGCCTCCA
 AGGGGAGCGGCTGGGCAACATCTGCCTGTGGAGCTGGAGGCAGAGCTGGGGGGCCGGGGCAGCCAGTC
 CACGGTGGCAGTGGTGGTCTGGCGCGGCTGCAATGGTCTGCCAGGAGTTGGCCTACTTCTCGCTCAGC
 GCCTGCCCTGATAAGGGGATTGTGCTCTGTGGGATGAGGAGGGCAACGTGTGGCTCTACGACGTACGCA
 ACATCTGAAGCAGCCACCCCTGCTGCCGGCAGCCCTGCAGGCCCCACACAGATCCTGAAGTGGCCCCA
 GCCCTGGGCCCTTGCCAGGTGGTGAACAAGACCATGGTGAACACAGTGGTGGCCAATGCCTCCTTACC
 TACCTACCGCCCTGACGGAATCAACATCGTAGCCATCTGGGGGAGGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG207141 representing NM_152892
 Red=Cloning site Green=Tags(s)

MGPLSARLLMQRGRPKSDRLGKIRSLDLSGLELLSEHLDPKLLCRLTQLQELDLNNHLETLPDNLGLSH
 LRVLRCAANNQLGDVTALCQFPKLEELSLEGNPFLTVDNLKVSFLLPTLRKVNKGKASSTYSQVENLNRE
 LTSRVTAHWEKFMATLGPEEEAEKAQADFVKSAYRDVRYGPESLSEFTQWRVRMISEELVAASRTQVQKA
 NSPEKPPEAGAAHKPRARLAALKRPDDVPLSLSPSKRACASPSAQVEGSPVAGSDGSQPAVKLEPLHFLQ
 CHSKNNSPQDLETQLWACAFPAWEEGATSQTVAATCGGEAVCVIDCQTGIVLHKYKAPGEEFFSVAWTAL
 MVVTQAGHKRWSVLAAGLRGLVRLHVRAGFCGVIKRAHKAIAITLFCSPAHETHLFTASYDKRIILW
 DIGVNPQDYEFQASQLLTLDTSIPLRLCPVASCPDARLLAGCEGGCCWDVRLDQPKRRVCEVEFVS
 EGSEASGRRVDGLAFVNEDIVASKSGSLGTICLWSWRQTWGGRSQSTVAVVVLARLQWSSTELAYFSL
 ACPDKGIVLCGDEEGNVWLYDVSNILKQPPLLPALQAPTQILKWPQWALGQVVTMTMNTVVANASFT
 YLTALTDSNIVAIWGRM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152892

ORF Size: 1941 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_152892.3](#)

RefSeq Size: 2220 bp

RefSeq ORF: 1944 bp

Locus ID: 222229

UniProt ID: [Q9UFC0](#)

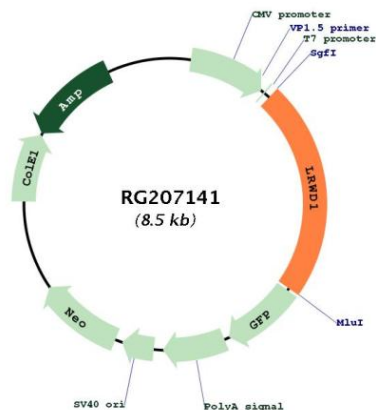
Cytogenetics: 7q22.1

Domains: LRR, WD40

Protein Families: Druggable Genome

Gene Summary: The protein encoded by this gene interacts with components of the origin recognition complex (ORC) and regulates the formation of the prereplicative complex. The encoded protein stabilizes the ORC and therefore aids in DNA replication. This protein is required for the G1/S phase transition of the cell cycle. In addition, the encoded protein binds to trimethylated histone H3 in heterochromatin and recruits the ORC and lysine methyltransferases, which help maintain the repressive heterochromatic state. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG207141