

## Product datasheet for **RG223063**

### **LDB3 (NM\_007078) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	LDB3 (NM_007078) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LDB3
Synonyms:	CMD1C; CMH24; CMPD3; CYPHER; LDB3Z1; LDB3Z4; LVNC3; MFM4; ORACLE; PDLIM6; ZASP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG223063 representing NM\_007078  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCTTACAGTGTGACCCTGACTGGGCCCGGCCCTGGGGCTTCGGTCTGCAGGGGGCAAGACTTCA  
 ACATGCCCTCACTATCTCCCGATCACACCAGGCAGCAAGGCAGCCAGTCCCAGCTCAGCCAGGGTGA  
 CCTCGTGGTGGCCATTGACGGCGTCAACACAGACACCATGACCCACCTGGAAGCCAGAACAAGATCAAG  
 TCTGCCAGCTACAATTGAGCCTCACCTGCAGAAATCAAAGCGTCCCATTCCCATCTCCACGACAGCAC  
 CTCCAGTCCAGACCCCTCTGCCGGTGATCCCTCACCAGAAGGACCCCGCTCTGGACACGAACGGCAGCCT  
 GGTGGCACCCAGCCAGCCCTGAGGCGAGGGCCAGCCAGGCACCCAGGCACCCCGGAGCTCAGGCC  
 ACCTTTAGCCCTGCCTTCTCCGGCCCTCCGCCTTCTCCTCACTGCGGAGGCCTCTGACCTGGCCCTC  
 CGCGGGCCAGCCTGAGGGCCAAGACCAGCCAGAGGGGGCCGGGACCTACTCGGCCAAAAGCCCTGCC  
 GGGCTCGAGCCAGCCGAGGCAATAAACAAACCCATTGGCTGTACTCGGCAGAGACCCCTGAGGGAGATG  
 GCTCAGATGTACCAGATGAGCCTCCGAGGGAAGGCCTCGGGTGTGCGACTCCAGGAGGGAGCCTCCCTA  
 TTAAGGACCTTGCCGTAGACAGCGCCTCTCCCGTCTACCAGGCTGTGATTAAGAGCCAGAACAAGCCAGA  
 AGATGAGGCTGACGAGTGGGCACGCCGTTCTCCAACCTGCAGTCTCGCTCCTCCGCATCTGGCCAG  
 ATGACGGGGACAGAATTCATGCAAGACCCTGATGAAGAAGCTCTGCGAAGGTCAAGCACCCCTATTGAGC  
 ATGCGCCGGTGTGCACCAGCCAGCCACCCCGCTGCTGCCCGCTTCTGCCAGCCACCTGCTGCTGC  
 CTCTCCAGTGGCGTTCGCCACCCCTGGCCACAGCTGCTGCCACACTGCCATCGCCTCCGCCTCCACC  
 ACAGCCCTGCTCAAGTCTCGCCAGCCAGCCAAAGGCCCCAGGCCTTTCCTACAGCCCGCAGTGGCC  
 CCTCTTACGACCTGCCACCCACACCAGCTACAGTGAGGGCCCGCCGCCCTGCACCCAAAGCCCGGGT  
 TGTCAACACTGCCAGCATCCGGCCTTCTGTCTACCAGCCAGTGCCTGCATCTACCTACAGCCCGTCCCA  
 GGGCCAATTACAGTCCCACTCCCTACACCCCTCCCTGCCCTGCCTACACCCCTCCCTGCCCTG  
 CCTACACCCCTCACCTGTCCACCTACACTCCATCCCAAGCACCAGCCTATACCCCTCACCTGCCCC  
 CAACTATAACCCTGCACCCTCGGTGGCCTACAGCGGGGGCCCTGCGGAGCCTGCCAGCCGTCCACCCTGG  
 GTGACAGATGATAGCTTCTCCAGAAGTTTGGCCGGCAAGAGCACCACCTCCATCAGCAAGCAGACCC  
 TGCCCCGGGAGGCCAGCCTACACCCAGCGGTCTCAGGTGCCACCCTGCCAGGGGGACCGTCCA  
 GAGGGCTGAGCGATTCCAGCCAGCAGCCGACTCCACTCTGCGGTCACTGCAACAATGTCATCCGGGGC  
 CCATTTCTGGTAGCCATGGCCGTTCTTGGCACCTGAAGAGTTCACCTGTGCCTACTGCAAGACTTCCC  
 TGGCAGATGTGTCTTTGTGGAAGAGCAGAACAACGTTTACTGTGAGCGATGTTATGAGCAATTCTTTGC  
 CCCGCTGTGTGCCAAGTGAACACCAAAATTATGGGGGAAGTAATGCATGCCTTGAGACAGACATGGCAC  
 ACCACCTGCTTCGTCTGTGCGGCCTGCAAGAAGCCTTTTGGGAACAGCCTTCCACATGGAAGACGGGG  
 AGCCCTACTGCGAGAAAGACTACATCAATCTGTTACAGACCAAGTCCATGGCTGCGATTCCCCGTGGA  
 GGCTGGCACAAGTTTATCGAAGCCCTGGGCCACACTTGGCACGACACCTGCTTCATTTGCGCAGTCTGC  
 CATGTGAATCTGGAGGGGAGCCGTTCTACTCAAAGAAGGACAGACCCCTGTGCAAGAAGCACGCACACA  
 CCATCAACTTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG223063 representing NM\_007078  
Red=Cloning site Green=Tags(s)

```

MSYSVTLTGPGPWGFRLQGGKDFNMPLTISRITPGSKAAQSQLSQGDLVVAIDGVNTDTMTHLEAQNKIK
SASYNLSLTLQSKRPIPISTTAPPVQTPLPVIHPHQKDPALDTNGSLVAPSPSPEARASPGTPGTPPELRP
TFSPAFSRPSAFSSLAESDPGPPRASLRAKTSPEGARDLLGPKALPGSSQPRQYNNPIGLYSAETLREM
AQMYQMSLRGKASGVGLPGGSLPIKDLAVDSASPVYQAVIKSQNKPEDEADEWARRSSNLQSRFRILAQ
MTGTEFMQDPDEEALRRSSTPIEHAPVCTSQATTPLLPASAQPPAAASPSAASPLATAAAHTAIASAST
TAPASSPADSPRQASSYSPAVAASSAPATHTSYSEGPAAPAPKPRVTTASIRPSVYQVPVASTYSPSP
GANYSPTPYTPSPAPAYTPSPAPAYTPSPVPTYTPSPAPAYTPSPAPNYNPAPSVAYSGGPAEPASRPPW
VTDDSFQKQFAPGKSTTSISKQTLPRGGPAYTPAGPQVPLARGTVQRAERFPASSRTPLCGHCNNVIRG
PFLVAMGRSWHPEEFTCAYCKTSLADVCFVEEQNNVYCERCYEQFFAPLCAKCNKIMGEVMHALRQTDWH
TTCFVCAACKKPFNSLFHMEDGEPYCEKDYINLFFSTKCHGCDPVEAGDKFIEALGHTWHDTCFICAVC
HVNLEGQPFYSKKDRPLCKKHAHTINL
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_007078

**ORF Size:** 2181 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\\_007078.3](#)

**RefSeq Size:** 5308 bp

**RefSeq ORF:** 2184 bp

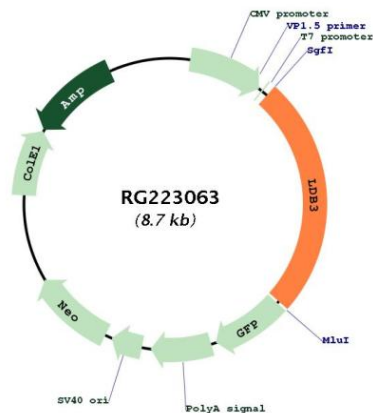
**Locus ID:** 11155

**UniProt ID:** [O75112](#)

**Cytogenetics:** 10q23.2

**Gene Summary:** This gene encodes a PDZ domain-containing protein. PDZ motifs are modular protein-protein interaction domains consisting of 80-120 amino acid residues. PDZ domain-containing proteins interact with each other in cytoskeletal assembly or with other proteins involved in targeting and clustering of membrane proteins. The protein encoded by this gene interacts with alpha-actinin-2 through its N-terminal PDZ domain and with protein kinase C via its C-terminal LIM domains. The LIM domain is a cysteine-rich motif defined by 50-60 amino acids containing two zinc-binding modules. This protein also interacts with all three members of the myozenin family. Mutations in this gene have been associated with myofibrillar myopathy and dilated cardiomyopathy. Alternatively spliced transcript variants encoding different isoforms have been identified; all isoforms have N-terminal PDZ domains while only longer isoforms (1, 2 and 5) have C-terminal LIM domains. [provided by RefSeq, Jan 2010]

### Product images:



Circular map for RG223063