

## Product datasheet for MR231762

### Clasp2 (NM\_001286602) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Clasp2 (NM_001286602) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Clasp2
Synonyms:	1500004F14Rik; 8030404L10Rik; C77448; CLASP2beta; mKIAA0627
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231762 representing NM_001286602 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAGCGCGCTGATTTGCAAACGGATCTGTGATTATAAAAGCTTTGATGATGAGGAATCAGTGGATGGAA  
ATAGGCCGTCGTCAGCTGCTTCAGCCTTCAAGGTTCTGCACCTAAAACACCTGGGAATCCTGTCAGCAG  
TGCAAGAAAGCCTGGCTCAGCAGGTGGCCCTAAGGTTGGAGGTCCTTCTAAAGAAGGAGGGGCTGGAGCA  
GTTGATGAAGATGACTTTATAAAAGCTTTTACAGATGTTCTTCTGTTTCAGATCTATTCTAGTCGAGAAC  
TTGAAGAGACGTTAAATAGATCAGGAAATTTTGTGATGACAAACATGACTGGGACCAGCGTGCCAA  
TGCGCTTAAGAAAATCAGATCACTGCTTGTGCTGGAGCCGCACAGTATGATTGCTTTTTCCAGCACCTA  
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GCTTTTTAATCTGTCCCAATAGTGCCAAAGTCATGGCGACCTCTGGATGTGCAGCAATCAGATTTATT  
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TAAGGAGACGTTTCATTTGAATTTTAGATTTGCTGCTGCAAGAATGGCAGACTATTCACTGGAAAGACA  
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CAGGTCCTCATCCAGCTCACAAGAAAGTCTCAATCGTCTTTTTCTTCTAAATGGTCAACAGCAAATCCT  
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GTCAATTCAGCTTCAGCACAGAAGAGAAGCAAGATCCCAAGGAGCCAGGGCTGCAGCAGAGAGGCCAGCC



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CATCTCGGCTCTCAGTGGCCCGGAGCAGCCGATTCCTCGGCCGAGTGTGAGTCAAGGCTGTAGCCGGGA  
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CCAACACCTCGGTACCAGCCAACTGGTCCAGTCTTACTTCTCCTACCAACAGTCTCAGAATACGT  
TATCTCAAGTGCATTTGATTACGATACAGAGAACATGAATTTCTGAAGACATTTATAGCTCCCTTAGAGG  
CGTCACTGAGGCAATCCAGAATTCAGTTCAGAAGCCAAAGAAGATAGAGTGAAGCCAGTGAAGGAGGC  
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GAGCAGTGCATCAAAGTCTTTGTCCATCATACAAACCGCTGACTACCCTATTAATCTGGCTGCAATCA  
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TGAACCTTACATCAAGCGTGCACAGACGGGCTCTGCAGGCGGGACCCACTGCTGATGTTTCTGGACA  
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**Protein Sequence:** >MR231762 representing NM\_001286602  
 Red=Cloning site Green=Tags(s)

MRR LICKRICDYKSFDEESVDGNRPSSAASAFKVPAPKTPGNPVSSARKPGSAGGPKVGGPSKEGGAGA  
 VDEDDF IKAFTDVPVSVQIYSSRELEETLNKIREILSDDKHDWDQRANALKKIRSLLVAGAAQYDCFFQHL  
 RLLDGLKLSAKDLRSQVVREACITVAHLSTVLGNKFDHGAEIVPTLFNLV PNSAKVMATSGCAAIRFI  
 IRHHTVPRLIPLITSNCTSKSVPVRRRSFEFLDLLLQEWQTHSLERHAAVLVETIKKGIHDADAERVEA  
 RKTYMGLRNHFPGEAETLYNSLEPSYQKSLQTYLKSSGSVASLPQSDRSSSSSQESLNRPFSSKWSTANP  
 STVAGRVSVGGSKANPLPGSLQRSRSDIDVNAAGAKAHHAAGQAVRSGRLGAGALNPGSYASLEDTSDK  
 MDGTASDDGRVRAKLSTPLVAVGNAKTDGRGRSRTKMVSQSQPGSRSGSPGRVLT TTTALSTVSSGAQRVL  
 VNSASAQKRKIPRSQGC SREASPSRLSVARSSRIPRPSVSQGC SREASRESSRDTSPVRSFQPLASRHH  
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 YGMHSDDDANS DASSAC SERSYSSRNGSIPTYMRQTEDVAEVLNRCASSNWSERKEGLLGLQNLKNQRT  
 LSRVELKRLCEIFTRMFADPHGKR VFSMFLETLVDFIQVHKDDLQDWLFVLLTQLLKKMGADLLGSVQAK  
 VQKALDITRESFPNDLQFNILMRFTVDQTQTPSLKVKVAILKYIETLAKQMDPRDF TNSSETRLAVSRVI  
 TWTTEPKSSDVRKAAQSVLISL FELNTPFTMLL GALPKTFQDGATKLLHNHLRNTGNGTQSSMGSPLTR  
 PTPRSPANWSSPLTSP TNTSQNTLSPSAFDYD TENMNSEDIYSSLRGVTEAIQNF SFRSQEDMSEPVRRD  
 PKKEDGDTICSGPGMSDPRAGGDAADG SQPALDNKASLLHSMPLHSSPRSRDYNPNYSDSISPFNK SAL  
 KEAMFDDADQFPDDL SLDHSDLVAELLKELSNHNERIEERKIALYELMKTQEESFSVWDEHFKTI LLL  
 LLETLDGKEPTIRALALKVLKEILRHQPARFKNYAELVMKTL EAHKDPHKEVVRSAEEAASVLATSI SP  
 EQCIKVLCP I IQTADYPINLAAIKMQTKVIERVSKETLNMLLPEIMPGLIQGYDNSESSVRKACVFLVA  
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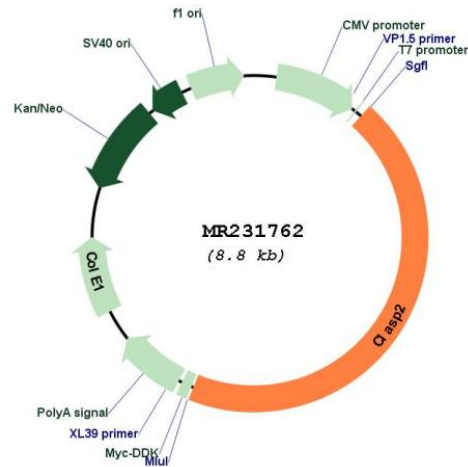
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001286602

**ORF Size:** 3924 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\\_001286602.1](#), [NP\\_001273531.1](#)

**RefSeq Size:** 5690 bp

**RefSeq ORF:** 3927 bp

**Locus ID:** 76499

**UniProt ID:** [Q8BRT1](#)

**Cytogenetics:** 9 F3

**MW:** 143.5 kDa

**Gene Summary:** Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules. Involved in the nucleation of noncentrosomal microtubules originating from the trans-Golgi network (TGN). Required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards the leading edge of the cell. May act at the cell cortex to enhance the frequency of rescue of depolymerizing microtubules by attaching their plus-ends to cortical platforms composed of ERC1 and PHLDB2. This cortical microtubule stabilizing activity is regulated at least in part by phosphatidylinositol 3-kinase signaling. Also performs a similar stabilizing function at the kinetochore which is essential for the bipolar alignment of chromosomes on the mitotic spindle. Acts as a mediator of ERBB2-dependent stabilization of microtubules at the cell cortex.[UniProtKB/Swiss-Prot Function]