

## Product datasheet for MR231567

### Clasp2 (NM\_001286601) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Clasp2 (NM_001286601) 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:	>MR231567 representing NM_001286601 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGACCTCTGGATGTCAGCAATCAGATTTATTATTCGGCATACCCATGTACCTAGACTTATTCCTT  
TAATAACAAGCAACTGCACATCAAAGTCAGTTCCTGTAAGGAGACGTTTCATTTGAATTTTATAGATTTGCT  
GCTGCAAGAATGGCAGACTCATTCACTGGAAAGACATGCAGCTGTTTTGGTTGAAACGATTAAGAAGGGC  
ATTCATGATGCTGATGCTGAGGCCAGAGTGGAGGCAAGGAAGACATACATGGGCCTTAGGAACCACTTTC  
CTGGTGAAGCTGAAACATTGTACAACCTCCCTTGAGCCATCATATCAGAAAAGTCTTCAAACCTACTTAAA  
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CGTCCTTTTTCTTCTAAATGGTCAACAGCAAATCCTTCAACTGTAGCTGGAAGAGTATCTGTGGGAGGCA  
GCAAAGCCAACCCCTTCCAGGAAGCCTGCAGCGTTCTCGAAGTGACATTGATGTGAATGCGGCAGCTGG  
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GGCTCCTATGCATCACTAGAGGATACTTCTGACAAGATGGATGGAACAGCATCTGATGATGGTCGGGTGA  
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TCCTCGGCGAGTGTGAGTCAAGGCTGTAGCCGGGAAGCCAGCAGAGAGAGCAGCAGGGACAGGATCCG  
GTGCGCTCCTCCAGCCGCTGGTCCGGGATATGGGATCAGCCAGTCCAGCCGTTGTCGTCCTCTGTCA  
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TAGTAGATTTTCATACAAGTCCACAAAGATGATCTTCAAGATTGGTTGTTTCTGCTGACACAGCTGCT  
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 AGAAAGCAGTGTCCGAAAAGCTTGTGTCTTGCCTGGTGGCTGCTCATGCAGTATTGGTGATGAACTA  
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 CGGGCTCTGCAGGCGGGACCCACTGCTGATGTTTCTGGACAGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR231567 representing NM\_001286601  
 Red=Cloning site Green=Tags(s)

MATSGCAAIRFIIRHTHVPRLIPLITSNCTSKSVPVRRRSFEFLDLLLQEWQTHSLERHAAVLVETIKKG  
 IHDADAEARVEARKTYMGLRNHFPEAETLYNSLEPSYQKSLQTYLKSSGSVASLPQSDRSSSSSQESLN  
 RPFSSKWTANPSTVAGRVSVGGSKANPLPGSLQRSRSDIDVNAAGAKAHHAAGQAVRSGRLGAGALNP  
 GSYASLEDTSDKMDGTASDDGRVRAKLSTPLVAVGNAKTDSRGRSRTKMVSQSQPGRSRSRSPGRVLT  
 LSTVSSGAQRVLSNSASAQKRKIPRSQGCRESASPSRLSVARSSRIPRPSVVSQGCRESASRESRDTSP  
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 NSDASSACERSYSSRNGSIPTYMRQTEDVAEVLNRCASSNWSERKEGLLGLQNLKLNQRTL SRVELKRL  
 CEIFTRMFADPHGKRVFSMFLVDFIQVHKDDLQDWLFLVLLTQLLKKMGADLLGSVQAKVQKALDITR  
 ESFPNDLQFNILMRFTVDQQTPTSLKVKVAIILKYIETLAKQMDPRDFTNSSSETRLAVSRVITWTTEPKSS  
 DVRKAAQSVLISLFEINTEPFTMLL GALPKTFQDGATKLLHNHLRNTGNGTQSSMGSPTRPTPRSPANW  
 SSPLTSPNTSQNTLSPSAFDYDTEMNNSEDIYSSLRGVTEAIQNF SFRSQEDMSEPVRDPKEDGDTI  
 CSGPGMSDPRAGGDAADGSQPALDNKASLLHSMPLHSSPRSRDYNPNYSDSISPFNKALKAMFDDDA  
 DQFPDDLSDHSDLVAELLKELSNHNERIEERKIALYELMKLTQEESFSVWDEHFKITLLLLLETLGDKE  
 PTIRALALKVLKEILRHQPARFKNYAELVMKTL EAHKDPHKEVVRSAEEAASVLATISISPEQCIKVLCP  
 IIQTADYPINLAAIKMQTKVIERVSKETLNMLLPEIMPGLIQGYDNSESSVRKACVFCVAVHAVIGDEL  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

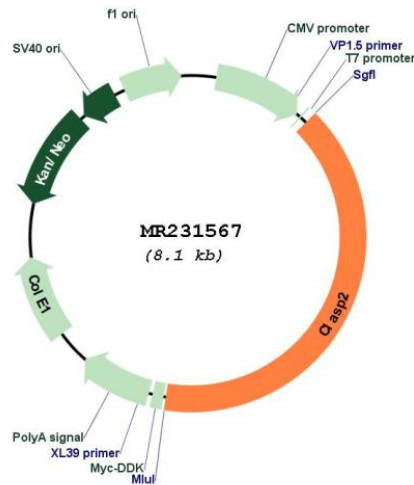
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001286601

ORF Size: 3267 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.

<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>RefSeq:</b>	<u>NM_001286601.1, NP_001273530.1</u>
<b>RefSeq Size:</b>	5644 bp
<b>RefSeq ORF:</b>	3270 bp
<b>Locus ID:</b>	76499
<b>UniProt ID:</b>	<u>Q8BRT1</u>
<b>Cytogenetics:</b>	9 F3
<b>MW:</b>	119.9 kDa
<b>Gene Summary:</b>	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]