

Product datasheet for **MC224148**

Clasp2 (NM_029633) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Clasp2 (NM_029633) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Clasp2
Synonyms:	1500004F14Rik; 8030404L10Rik; C77448; CLASP2beta; mKIAA0627
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224148 representing NM_029633 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAGCGCGTGTATTTGCAAACGGATCTGTGATTATAAAAGCTTTGATGATGAGGAATCAGTGGATGGAA
ATAGGCCGTCGTCAGCTGCTTCAGCCTTCAAGGTTCTGCACCTAAAACACCTGGGAATCCTGTCAGCAG
TGCAAGAAAGCCTGGCTCAGCAGGTGGCCCTAAGGTTGGAGGTCCTTCTAAAGAAGGAGGGGCTGGAGCA
GTTGATGAAGATGACTTTATAAAAGCTTTTACAGATGTTCTTCTGTTTCAGATCTATTCTAGTCGAGAAC
TTGAAGAGACGTTAAATAGATCAGGAAATTTTGTGATGACAAACATGACTGGGACCAGCGTGCCAA
TGCGCTTAAGAAAATCAGATCACTGCTTGTGCTGGAGCCGCACAGTATGATTGCTTTTTCCAGCACCTA
CGTTTGTGGATGGAGCGCTTAAGCTGTGAGCTAAGGACCTCAGATCCCAGGTGGTCAGGGAAGCTTGCA
TCACTGTTGCTCACCTTTCAACAGTCTTGGGAAACAAATTTGATCACGGCGCTGAAGCCATCGTCCCTAC
GCTTTTTAATCTGTCCCAATAGTGCCAAAGTCATGGCGACCTCTGGATGTGCAGCAATCAGATTTATT
ATTCGGCATACCCATGTACCTAGACTTATTCCTTAATAACAAGCAACTGCACATCAAAGTCAGTTCCCTG
TAAGGAGACGTTCAATTTGAATTTTAGATTTGCTGCTGCAAGAATGGCAGACTCATTCACTGGAAAGACA
TGCAGCTGTTTTGGTTGAAACGATTAAGAAGGGCATTGATGCTGATGCTGAGGCCAGAGTGGAGGCA
AGGAAGACATACATGGGCTTAGGAACCTTTCTGGTGAAGCTGAAACATTGTACAACCTCCCTTGAGC
CATCATATCAGAAAAGTCTTCAAACCTACTTAAAGAGTTCTGGAAGTGTAGCTTCTCTCCGCAGTCAGA
CAGGTCCTCATCCAGCTCACAAGAAAGTCTCAATCGTCTTTTTCTTCTAAATGGTCAACAGCAAATCCT
TCAACTGTAGCTGGAAGAGTATCTGTGGGAGGCAGCAAAGCCAACCCCTTCCAGGAAGCCTGCAGCGTT
CTCGAAGTGACATTGATGTGAATGCGGCAGCTGGTGCCAAGGCTCATCATGCTGCTGGGCAGGCGGTGCG
AAGTGGGCGCTTAGGTGCAGGTGCCCTGAACCCAGGCTCCTATGCATCACTAGAGGATACTTCTGACAAG
ATGGATGGAACAGCATCTGATGATGGTGGGTGAGAGCCAAGCTTCTACACCGCTTGTGTGTGGGAA
ATGCCAAGACCGACTCTAGAGGGAGAAGCCGGACAAAAATGGTGTCTCAGTCCCAGCCTGGCAGCCGATC
TGGGTCTCCAGGAAGAGTTCTAACCACAACAGCCCTCTACTGTGAGCTCTGGTGTCAACGAGTCTGT
GTCAATTCAGCTTCAGCACAGAAGAGAAGCAAGATCCCAAGGAGCCAGGGCTGCAGCAGAGAGGCCAGCC



CATCTCGGCTCTCAGTGGCCCGGAGCAGCCGATTCTCTCGGCCGAGTGTGAGTCAAGGCTGTAGCCGGGA
 AGCCAGCAGAGAGAGCAGCAGGGACACGAGTCCGGTGCCTCTCCAGCCGCTGGTCCGGGATATGGG
 ATCAGCCAGTCCAGCCGGTTGTCGTCTCTGTGAGTCCATGCGAGTCTAAACACAGGCTCCGATGTGG
 AGGAGGCAGTAGCTGATGCCCTGCTCTTAGGAGACATACGGACTAAGAAAAACCTGCTCGAAGAAGGTA
 TGAATCATATGGAATGCACTCAGATGATGATGCCAACAGCGATGCCTCTAGTGCCTGTTGAGAAGCTCC
 TATAGCTCTCGAAATGGTAGTATTCTACCTACATGAGACAGACAGAAGACGTGGCAGAAGTCTCAACA
 GATGTGCTAGCTCAATTGGTCAGAGAGGAAAGAAGGCCTCTGGGTCTGCAGAAGTGTAAAAAACCA
 GAGAACGCTAAGTCGAGTTGAACTGAAAAAGATTATGTGAAATTTTCAACAAGATGTTGCGATCCTCAT
 GGCAAGGTGTTGAGCATGTTCTGGAGACTCTAGTAGATTTTATACAAGTCCACAAGATGATCTTCAAG
 ATTGGTTGTTGTTCTGCTGACACAGCTGCTGAAAAAATGGGTGCTGATTTGCTTGGCTGTTTACGGC
 AAAAGTTCAGAAAGCCCTTGATATTACAAGAGAGTCTTTTCCAAATGATCTTCAAGTTAATATCCTAATG
 AGATTTACAGTTGACCAGACCCAAACGCCAAGCTTGAAGGTAAGGTGGCTATCCTTAAGTACATAGAAA
 CTCTGGCAAAAGCAGATGGACCCAAAGAGATTTTACAATTCAGTGAAGTCCGCTGGCAGTGTCTCGGT
 CATCACTTGGACGACAGAGCCAAAAGCTCTGATGTTCCGAAGGCAGCGCAGTCACTGCTGATTTCTTTA
 TTTGAACTCAATACCCAGAGTTTACAATGTTACTAGGAGCTTTACCAAAAACCTTCCAGGATGGTCTA
 CTTAACTTCTTACAATCACCTCCGGAACACTGGCAATGGCACCCAGAGTTCATGGGGAGTCTTTGAC
 GAGACCAACACCTCGGTACCAGCCAAGTGGTCCAGTCCCTTACTTCTCTACCAACACGTCTCAGAAT
 ACGTTATCTCAAGTGCATTTGATTACGATACAGAGAATGAATTCTGAAGACATTTATAGCTCCCTTA
 GAGGCGTCACTGAGGCAATCCAGAATTTAGCTTCCAGAAAGCAAGAGATGAGTGAGCCAGTGAAGGAG
 GGACCCTAAAAAGGAGGATGGTGACACAATATGTAGTGGTCTGGGATGTGAGTCCAGAGCAGGAGGT
 GATGCTGCTGACGGCAGCCAGCTCTGGATAATAAAGCATCGTTGCTCCACTCAATGCCACTCCACT
 CCTCTCCACGCTCCCGTACTATAACCCATATAACTACTCAGATAGCATCAGTCTTTTCAACAAGTCTGC
 CCTCAAGGAAGCCATGTTTATGATGATGACGCCACCAATTTCTGATGATCTTTCTTAGACCATTCTGAC
 CTAGTTGCAGAGTTGTTGAAGGAGCTGTCTAATCATAAATGAACGTATAGAAGAAAGAAAAATTGCCCTGT
 ATGAACTCATGAAGCTAACCAGGAAGAATCTTTCAGTGTGGGATGAACACTTCAAAAACATATTATT
 GTTATTGCTTGAAGCCCTGGGGATAAAGAGCCTACAATCCGGGCCTTGGCATTAAAGTTTTAAAGAA
 ATCTTAAGGCATCAACCAGCAAGATTCAAAAACACTGCAGAACTAAGTGCATGAAAACACTGGAAGCAC
 ATAAAGATCCTCACAAGAGGTTGGTGGATCTGCTGAGGAAGCTGCCTCCGATTGGCTACTTCCATTAG
 TCCAGAGCAGTGCATCAAAGTCTTTGTCCATCATACAAACCGTACTACCCTATTAATCTGGCTGCA
 ATCAAAATGCAAAACAAAAGTATAGAGAGAGTATCCAAGGAGACCCTAACATGCTTTACCAGAGATCA
 TGCCGGGTCTAATACAGGTTATGATAATTCAGAAAGCAGTGTCCGGAAGCTTGTGCTTCTGCTGGT
 GGCTGTCCATGCAGTATTGGTATGAACATAAGCCACATCTCAGTCAACTCACTGGTAGTAAATGAAG
 CTGCTGAACCTTTACATCAAGCGTGCACAGACGGGCTCTGCAGGCGCGGACCCCACTGCTGATGTTCTG
 GACAGAGT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_029633
- Insert Size:** 3861 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_029633.2](#), [NP_083909.2](#)

RefSeq Size: 5624 bp

RefSeq ORF: 3861 bp

Locus ID: 76499

Cytogenetics: 9 F3

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]

Transcript Variant: This variant (1) differs in the 5' UTR, lacks a portion of the 5' and 3' coding region, and initiates translation at an alternate start codon, compared to variant 3. It encodes isoform a, which is shorter and has a distinct N-terminus, compared to isoform c.