

Product datasheet for **SC304229**

CLASP2 (NM_015097) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLASP2 (NM_015097) Human Untagged Clone
Tag:	Tag Free
Symbol:	CLASP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_015097, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCCCCGCAGCATGGAGTACTTCTGCGCCAGGTGCAGCAGAAGGACGTCGGCGGCCGGCTGCAGG
TCGGCCAGGAGCTCCTGTCTACCTTGGCGCCCCGGCGCCATCTCGGACCTGGAGGAGGACCTGGGCCG
CCTAGGCAAGACAGTCGACGCGCTCACCGGCTGGTGGTTTCGAGCAACTACCGGTATCATTAAATGGGA
TTGGAAATTTAAGTGCCTTTGTGGACAGATTATCAACACGCTTTAAATCCTATGTAGCAATGGTTATTG
TAGCTTTAATAGACAGAAATGGGAGATGCCAAAGACAAGTTTCGAGATGAAGCTCAGACTCTGATATTGAA
GTTAATGGATCAAGTAGCACCACCTATGTACATTTGGGAGCAGTTGGCTTCTGGTTTTAACACAAGAAT
TTTCGATCTCGAGAAGGCGTGTCTGTCTTATTGAAACCTTAAACATTTTTGGGGCTCAGCCACTAG
TCATCAGCAAATGATACCACATTTGTGTATCCTGTTTGGAGACTCCAACAGTCAGGTGAGAGATGCTGC
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ATCCCCCTGCTAGATTAGAAATGATATTTGCCAAATTTGATGAAGTGCAAAGTTCAGGCGGTATGATTT
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GAGTATCAGCAGGCAGCAGCAAAGCCAGTTCCTTCCAGGAAGCCTGCAGCGTTCACGAAGTGACATTGA
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 TAAGGAGGTGGTGAATCTGCTGAGGAAGCGGCATCAGTGTGGCCACTCAATTAGTCCAGAGCAGTGC
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 CAAAAGTGATAGAGAGAGTGTCCAAGGAAACCTAAACCTGCTTTTGGCAGAGATTATGCCAGGTCTAAT
 ACAGGGTTATGATAATTCAGAGAGCAGTGTTCGGAAAGCTTGTGTCTTCTGCCTGGTGGCTGTTTCATGCG
 GTAATTTGGTGTGAACTAAAACCACATCTCAGTCAACTTACTGGCAGTAAAATGAAGCTACTGAATCTTT
 ACATCAAACGTGCACAAAACAGGTTCTGGAGGAGCTGATCCCACTACTGATGTTTTCTGGACAAAGTTAG

Restriction Sites: Please inquire

ACCN: NM_015097

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_015097.1](#), [NP_055912.1](#)

RefSeq Size: 7289 bp

RefSeq ORF: 4521 bp

Locus ID: 23122

UniProt ID: [O75122](#)

Cytogenetics: 3p22.3

Gene Summary:

Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules (PubMed:26003921). 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 (PubMed:16824950). 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 (PubMed:16866869, PubMed:16914514). Acts as a mediator of ERBB2-dependent stabilization of microtubules at the cell cortex.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer variant and encodes the longer isoform (1).