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Product datasheet for RG233210

CLASP2 (NM_001207044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLASP2 (NM_001207044) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CLASP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG233210 representing NM_001207044 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCTATGGGAGATGATAAAAGCTTCGATGATGAAGAATCAGTGGATGGAAATAGGCCATCATCAGCTG CATCAGCCTTCAAGGTTCCTGCACCTAAAACATCCGGAAATCCTGCCAACAGTGCAAGGAAGCCTGGTTC AGCAGGTGGCCCTAAGGTTGGAGGTGCTTCTAAGGAAGGAGGTGCTGGAGCAGTTGATGAAGATGATTTT ATAAAAGCTTTTACAGATGTCCCTTCTATTCAGATTTATTCTAGTCGAGAACTCGAAGAAACATTAAATA AAATCAGGGAAATTTTGTCAGATGATAAACATGACTGGGATCAGCGTGCCAATGCACTGAAGAAAATTCG ATCACTGCTTGTTGCTGGAGCTGCACAGTATGATTGCTTTTTTCAACATTTACGATTGTTGGATGGAGCA CTTAAACTTTCAGCTAAGGATCTTAGATCCCAGGTGGTTAGAGAAGCTTGTATTACTGTAGCCCACCTTT CAACAGTTTTGGGAAACAAGTTTGATCATGGCGCTGAAGCCATTGTACCTACACTTTTTAATCTCGTCCC CAATAGTGCAAAAGTCATGGCAACTTCTGGATGTGCAGCAATCAGATTTATCATTCGGCATACTCATGTA CCCAGACTTATACCTTTAATAACAAGCAATTGCACATCAAAATCAGTTCCCGTGAGGAGACGTTCATTTG AATTTTTAGATTTATTGTTGCAAGAGTGGCAGACTCATTCATTGGAAAGACATGCAGCCGTCTTGGTTGA AACTATTAAAAAGGGAATTCATGATGCTGACGCTGAGGCCAGAGTGGAGGCAAGAAAGACATACATGGGT CTTAGAAACCACTTTCCTGGTGAAGCTGAAACATTATATAATTCCCTTGAGCCATCTTATCAGAAGAGTC TTCAAACTTACTTAAAGAGTTCTGGCAGTGTAGCATCTCTTCCACAATCAGACAGGTCCTCATCCAGCTC ACAGGAAAGTCTCAATCGCCCTTTTTCTTCCAAATGGTCTACAGCAAATCCATCAACTGTGGCTGGAAGA GTATCAGCAGGCAGCAGCAAAGCCAGTTCCCTTCCAGGAAGCCTGCAGCGTTCACGAAGTGACATTGATG TGAATGCTGCTGCAGGTGCCAAGGCACATCATGCTGCTGGACAGTCTGTGCGAAGCGGGCGCTTAGGTGC AGGTGCCCTGAATGCAGGTTCCTATGCGTCACTAGAGGATACTTCTGACAAGCTGGATGGAACAGCATCT GAAGATGGCCGGGTGAGAGCAAAACTTTCAGCACCACTTGCTGGCATGGGAAATGCCAAGGCAGATTCTA GAGGAAGAAGTCGAACAAAAATGGTGTCTCAATCACAGCCTGGTAGCCGGTCTGGGTCTCCAGGAAGAGT TCTGACCACAACAGCCCTGTCCACTGTGAGCTCTGGTGTTCAAAGAGTCCTGGTCAATTCAGCCTCAGCA CAAAAAAGAAGCAAGATACCACGGAGCCAGGGCTGTAGCAGAGAGGCTAGTCCATCTAGGCTTTCAGTGG CCCGAAGCAGTCGTATTCCTCGACCAAGTGTGAGTCAAGGATGCAGCCGGGAAGCTAGTCGGGAGAGCAG

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CAACTTACTGGCAGTAAAATGAAGCTACTGAATCTTTACATCAAACGTGCACAAACAGGTTCTGGAGGAG
CTGATCCCACTACTGATGTTTCTGGACAAAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG233210 representing NM_001207044
Red=Cloning site Green=Tags(s)

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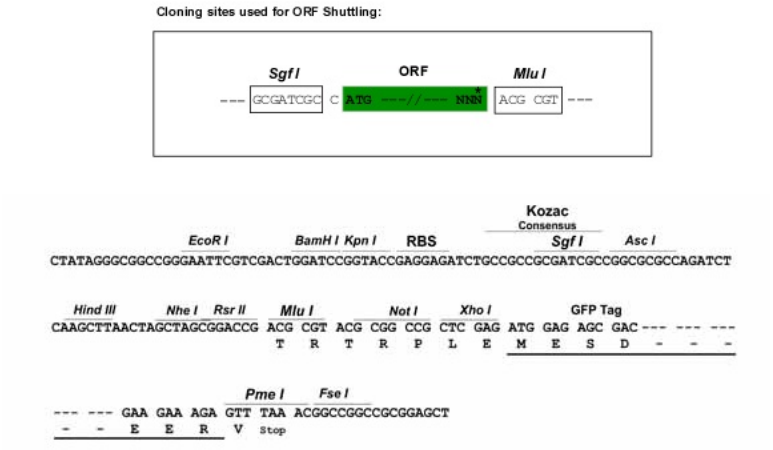
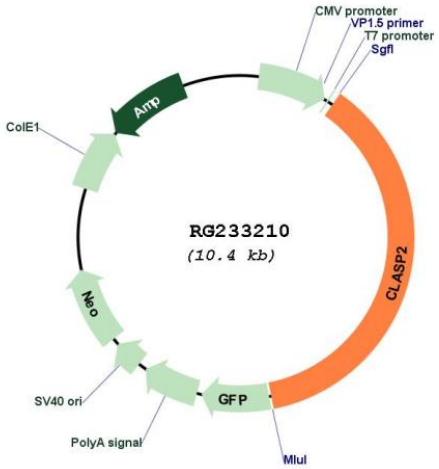
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001207044
ORF Size:	3882 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_001207044.3
RefSeq Size:	6733 bp
RefSeq ORF:	3885 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]