

Product datasheet for **RG234271**

CEP57 (NM_001243776) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CEP57 (NM_001243776) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CEP57
Synonyms:	MVA2; PIG8; TSP57
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234271 representing NM_001243776
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTGACCAGAATTGATAACAGCTTTGCTGAGCCATCAAGTCTAATGGAAGCATGGTTCGGCATTCTT
 CATCTCCATATGTAGTATACCTTCGGATAAGCCTTTCCTTAATAGTGATCTACGACGCTCCCAAGTAA
 GCCTACACTTGCCTATCCAGAAAGCAACAGCAGAGCCATATTTCTGCTCTTAAGAACTCTCAAGATAAG
 ATTCGACGCTTGGAACTTGAGAGGATTCAGGCAGAAAGAAAGTGAAAACCTTGCTAGAGAAACAATTG
 AATATAAGAAAGTACTGGATGAACAGATACAAGAAAGGGAGAATCAAAGAATGAGGAATCAAAGCACAA
 TCAAGAAGTACATCTCAGTTGTTAGCTGCAGAAAATAAATGCAATCTATTAGAAAAACAATTGGAATAC
 ATGCGAAATATGATAAAGCATGCCGAAATGGAGAGGACATCTGTCTTAGAGAAACAAGTTCCCTAGAAA
 GAGAACGACAACATGATCAAACACATGTTCAAGCCAACTTGAAAAATTGGATCTTCTTGAACAGGAGTA
 TAACAACTTACCACAATGCAGGCCCTTGCAAAAAAATAAATGCAAGAGTTGGAAGCAAACTCCATGAA
 GAAGAACAGGAAAGGAAACGCATGCAAGCTAAGGCAGCTGAGTTGCAGACTGGTCTAGAAACAAATAGAC
 TTATCTTTGAAGATAAGGCAACTCCGTGTGTTCCCAATGCAAGAAGAATAAAAAAGAAGTCAAACC
 ACCAGAAAAGAAAAGTTCTAGGAACTATTTTGGTGCACAACCACATTATAGATTATGCTTGGGTGATATG
 CCATTTGTAGCTGGGAAGTCCACAAGCCCTAGCCATGCCGTGGTAGCCAATGTTCAAGCTTGTCTTGCATC
 TAATGAAGCAACACAGTAAAGCTTTGTGCAATGATCGAGTCATCAACAGTATTCTTTGGCAAAGCAAGT
 ATCTTCACGAGGTGGTAAAAGTAAAGTGTGTCAGTAAACCTCCCTCCTCAACGGTATTAATGAGGAG
 TTGTCAGAAGTCTTACAGACTTTACAGGATGAATTTGGGCAAATGAGCTTTGATCACCAGCAGCTTGCAA
 AACTTATCCAGGAGTCCCAACCGTTGAACTGAAAGACAAGTTGGAGTGTGAATTGGAGCATTAGTGGG
 AAGGATGGAAGCAAAAGCCAACCAATAAAGTTCGAAAATACCAAGCCAGCTGGAGAAACAGAAG
 TTAGAGAAGCAGAAGAAGGAATTAAGGCTACCAAAAAGACTCTTGATGAAGAAAGAAACAGCAGCAGCC
 GTTCTGGAATCACAGGGACCACAATAAGAAAGATTTTATGAACTGAGACCTGGAGAAAAAGGAGAAA
 AAATCTCAGTTATTGAAGGACATGCAAGCATACAGAATTCATTACAAAGCAGTAGTTTGTGTTGGGAT
 TAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234271 representing NM_001243776
 Red=Cloning site Green=Tags(s)

MLTRIDNSFAEPSRSNGSMVRHSSSPYVVYPSPDKPFLNSDLRRSPSKPTLAYPESNSRAIFSALKNLQDK
 IRRLELERIQAEESVKTL SRETIEYKKVLDEQIQERENSKNEESKHNLQELTSQLLAAENKCNLLEKQLEY
 MRNMIKHAEMERTSVLEKQVSLERERQHDQTHVQSLEKLDLLEQEYNKLTMMQALAEKMQEAKLHE
 EEQERKRMQAKAAELQTGLETNRLIFEDKATPCVPNARRIKKKKSKPPEKKSSRNYFQAQPHYRLCLGDM
 PFVAGKSTSPSHAVVANVQLVLHLMKQHSKALCNDRVINSIPLAKQVSSRGGKSKKLSVTPPSSNGINEE
 LSEVLQTLQDEFQMSFDHQQAKLIQESPTVELKDKLECELEALVGRMEAKANQITKVRKYQAQLEKQK
 LEKQKELKATKKTLD EERNSSSRSGITGTTNKKDFMMLRPGEKRRKNLQLLKDMQSIQNSLQSSSLCWD
 Y

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001243776

ORF Size: 1473 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_001243776.1](#), [NP_001230705.1](#)

RefSeq Size: 3236 bp

RefSeq ORF: 1476 bp

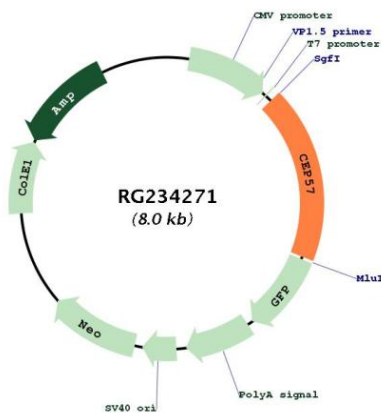
Locus ID: 9702

UniProt ID: [Q86XR8](#)

Cytogenetics: 11q21

Gene Summary:

This gene encodes a cytoplasmic protein called Translokin. This protein localizes to the centrosome and has a function in microtubular stabilization. The N-terminal half of this protein is required for its centrosome localization and for its multimerization, and the C-terminal half is required for nucleating, bundling and anchoring microtubules to the centrosomes. This protein specifically interacts with fibroblast growth factor 2 (FGF2), sorting nexin 6, Ran-binding protein M and the kinesins KIF3A and KIF3B, and thus mediates the nuclear translocation and mitogenic activity of the FGF2. It also interacts with cyclin D1 and controls nucleocytoplasmic distribution of the cyclin D1 in quiescent cells. This protein is crucial for maintaining correct chromosomal number during cell division. Mutations in this gene cause mosaic variegated aneuploidy syndrome, a rare autosomal recessive disorder. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011]

Product images:

Circular map for RG234271