OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC212710

CEP104 (NM_014704) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CEP104 (NM_014704) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CEP104
Synonyms:	CFAP256; GlyBP; JBTS25; KIAA0562; ROC22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC212710 representing NM_014704
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC212710 representing NM_014704
Red=Cloning site Green=Tags(s)

MPHKIGFVVVSSSGHEDGFSARELMIHAPTVSGWRSPRFCQFPQEIVLQMVERCRIRKLQLLAHQYMISS
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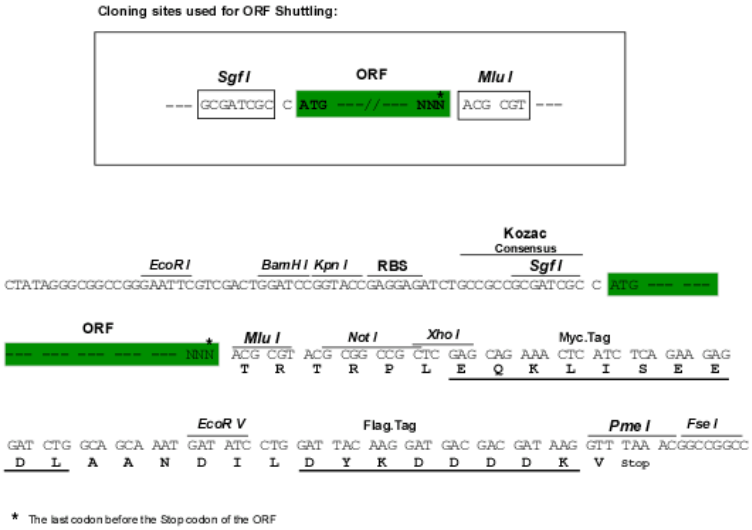
Chromatograms: https://cdn.origene.com/chromatograms/mk6612_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

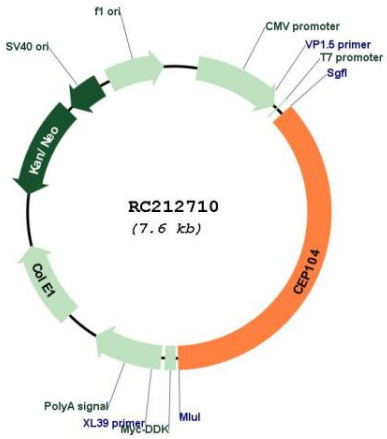


ACCN: NM_014704

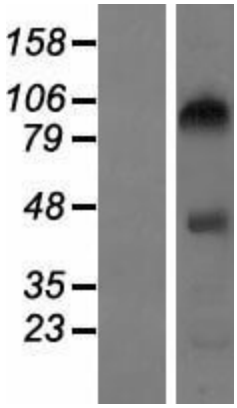
ORF Size: 2775 bp

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_014704.1, NP_055519.1
RefSeq Size:	5848 bp
RefSeq ORF:	2778 bp
Locus ID:	9731
UniProt ID:	O60308
Cytogenetics:	1p36.32
MW:	104.3 kDa
Gene Summary:	This gene encodes a centrosomal protein required for ciliogenesis and for ciliary tip structural integrity. The mammalian protein contains three amino-terminal hydrophobic domains, two glycosylation sites, four cysteine-rich motifs, and two regions with homology to the glutamate receptor ionotropic, NMDA 1 protein. During ciliogenesis, the encoded protein translocates from the distal tips of the centrioles to the tip of the elongating cilium. Knockdown of the protein in human retinal pigment cells results in severe defects in ciliogenesis with structural deformities at the ciliary tips. Allelic variants of this gene are associated with the autosomal-recessive disorder Joubert syndrome, which is characterized by a distinctive mid-hindbrain and cerebellar malformation, oculomotor apraxia, irregular breathing, developmental delay, and ataxia. [provided by RefSeq, Feb 2016]

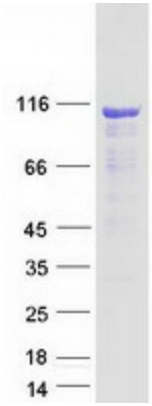
Product images:



Circular map for RC212710



Western blot validation of overexpression lysate (Cat# [LY415082]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212710 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CEP104 protein (Cat# [TP312710]). The protein was produced from HEK293T cells transfected with CEP104 cDNA clone (Cat# RC212710) using MegaTran 2.0 (Cat# [TT210002]).