

Product datasheet for MR209644

Cep290 (BC004690) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cep290 (BC004690) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cep290
Synonyms: MGC7859
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR209644 representing BC004690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209644 representing BC004690
 Red=Cloning site Green=Tags(s)

MEQTVAEQDSSLSSLLTKLKKVSKDLEKQKEITELKVREFENTKLRLQETHASEVKKVKAIVEDLRHALA
QAHKDSQSLKSELQAQKEANSRAPTTTMRNLVERLKSQALKEKQKALSRALLELRSEMTAAAEERIIA
VTSQKEANLNVQVVERHTRELKSIEDLNENLLKKEALKTSKNKENS LADDLNELNNE LQKKQKAYNK
ILREKDGIDQENDELRRQIKRLSSGLQSKTLIDNKQSLIDELQKKVKKLESQLERKVDDVDIKPVKEKSS
KEELIRWEEGKKWQTKVEGLRNRLKEKEGEAHGLAKQLNTLKFADKADKEKLTQKKLKTTGMTVDQVL
GVRALSEKELEELKKKNLDLENDILYMRTQQALPRDSVVEDLHLQNKYLQEKLHTEKLSKEKIVAEN
ERLRKELKKEIEASEKLRIAKNNLELVNDKMAAQLEETGKRLQFAESRAPQLEGADSKSWKSIVVSRVYE
TKMKELESDIAKKNQSIIDLKQLVREATEREQKAKKYTEDLEQQIEILKNVPEGAETEQELIRELQLRL
ANNQLDKERAELIHQIEINKDQTRADSSIPDSQLKEKINDLETQLRKLELEKQHSKEEVKLLKKELENF
DPSFF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:



ACCN: BC004690

ORF Size: 97 bp

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](#)

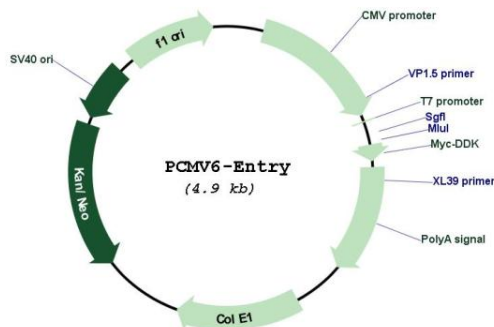
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>BC004690</u> , <u>AAH04690</u>
RefSeq Size:	2831 bp
RefSeq ORF:	1907 bp
Locus ID:	216274
Cytogenetics:	10 51.48 cM
MW:	103.7 kDa
Gene Summary:	Involved in early and late steps in cilia formation (PubMed:21565611). Its association with CCP110 is required for inhibition of primary cilia formation by CCP110 (By similarity). May play a role in early ciliogenesis in the disappearance of centriolar satellites and in the transition of primary ciliary vesicles (PCVs) to capped ciliary vesicles (CCVs). Required for the centrosomal recruitment of RAB8A and for the targeting of centriole satellite proteins to centrosomes such as of PCM1 (By similarity). Required for the correct localization of ciliary and phototransduction proteins in retinal photoreceptor cells; may play a role in ciliary transport processes (PubMed:16632484). Required for efficient recruitment of RAB8A to primary cilium (By similarity). In the ciliary transition zone is part of the tectonic-like complex (also named B9 complex) which is required for tissue-specific ciliogenesis and may regulate ciliary membrane composition (PubMed:21725307). Involved in regulation of the BBSome complex integrity, specifically for presence of BBS2, BBS5 and BBS8/TTC8 in the complex, and in ciliary targeting of selected BBSome cargos. May play a role in controlling entry of the BBSome complex to cilia possibly implicating IQCB1/NPHP5 (By similarity). Activates ATF4-mediated transcription (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209644