

## Product datasheet for **MC218579**

### Cep290 (BC004690) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cep290 (BC004690) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cep290
Synonyms:	MGC7859
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >OriGene sequence for BC004690 edited  
 CCCACGCGTCCGAGCAAAGAGAAATTGTTAAGAAGCATGAGGAAGACCTTCATGTTCTTCATCACAAATT  
 AGAACACAGGCCGATAATTCACCTCAATAAATTCAGACAGACAGCTCAGGATTTACTTAAGCAGTCTCCT  
 GCTCCAGTCCCACCAACAAACATTTTCATTCGTCTGGCCGAGATGGAGCAGACAGTAGCAGAACAAAGATG  
 ACTCTCTGTCTCACTTTTGACCAAACTAAAGAAAGTATCAAAAGATTTGGAAAAACAAAAAGAAATCAC  
 TGAGTTAAAAGTCAGAGAGTTTAAAAACCAAACCTACGGCTCCAAGAACTCATGCCAGTGAGGTAAAG  
 AAAGTGAAGCAGAGGTAGAGGACTTAAGGCATGCTCTAGCCCAAGCACACAAGGACTCCCAGAGTTTAA  
 AGTCTGAACTCCAGGCTCAGAAAAGCAAACTCCAGAGCTCCAACAACCAATGAGGAATCTTGTAGA  
 AAGGCTAAAAGAGCCAAGTACGCTTGAAAGAGAAGCAAAAAGGCACTTAGTCGAGCCCTGTTGAACTT  
 CGGTCCGAAATGACAGCAGCAGCTGAGGAACGTATAATCGCTGTAACCTTCAAAAAGAGGCAAATCTCA  
 ATGTTCAACAAGTTGTTGAGCGCCATACTAGAGAGCTAAAGTCACAAATTGAAGATTTAAATGAAAAATCT  
 TTTAAATTTGAAAGAAGCTTTAAAACAAGTAAGAACAAGAAAATTCCTAGCTGATGATTTAAATGAA  
 TTAATAATGAACTGCAAAAAAGCAAAAAGCTTATAATAAAATCCTTAGAGAGAAAGATGGAATTGATC  
 AAGAAAATGATGAACTGAGAAGACAGATTAAGAACTGTCCAGTGGACTGCAGAGCAAACTTTGATAGA  
 TAACAAGCAAAGTTAATCGATGAACTTCAAAAAGAAAGTTAAAAAAGCTTGAAGCCAACTGGAAAGAAAG  
 GTGGATGACGTAGACATAAAGCCGGTGAAGGAAAAGAGTAGTAAAGAAGAATTAATTAGGTGGGAAGAAAG  
 GTAAGAAATGGCAAACCAAAGTAGAGGGACTACGAAACAGACTAAAGGAGAAGGAAGGAGAAGCCACCGG  
 CCTGGCAAAGCAGCTGAATACCTTAAAGGAACTTTTGGCAAAGCTGATAAAGAGAAACTTACTTTGCAG  
 AAGAACTGAAAACAACAGGAATGACTGTTGACCAGGTTTTAGGAGTGGCAGCTTTGGAATCTGAAAAAG  
 AGTTGGAAGAGCTAAAAAAGAAAATCTGGACCTAGAAAATGACATATTATACATGAGGACCCAGCAGGC  
 TCTTCCACGAGATTCTGTTGTGGAAGACTTACATTTACAAAATAAATACCTTCAAGAAAACTTCATACT  
 TTAGAAAAAACTTTCAAAGGAGAAAATTTGTTGCCGAAAATGAACGGCTTCGGAAGAACTTAAGAAAAG  
 AAATAGAAGCCTTGAGAAAATCGGGATAGCTAAGAACAACCTTAGAGCTGGTGAACGACAAGATGGCAGC  
 TCAACTCGAAGAACTGGGAAGAGACTACAGTTTGCAGAAAAGTAGAGCCCAACAGCTGGAAGGTGCTGAC  
 AGCAAGAGCTGGAAAGTCAATTGTGGTCTCAAGAGTGTATGAGACCAAGATGAAAGAGCTTAAAAGTGACA  
 TTGCCAAAAAGAATCAAAGTATCACTGACCTTAAACAGCTTGTAAAGAGAAGCAACAGAGAGAGAACAGAA  
 AGCTAAGAAATACACTGAAGACCTTGAACAACAGATTGAGATCTCAAAAATGTTCTGAAAGGTGCCGAG  
 ACAGAGCAAGAGCTTATACGGGAACTCCAGCTTCTTAGATTAGCCAATAATCAGCTGGATAAAGAAAAGG  
 CAGAATTAATCCATCAGATAGAAATTAACAAGGACCAACAGAGCTGACAGTAGCATACCTGATTCTGA  
 TCAACTAAAGGAAAAGATAAATGACCTGGAGACACAACCTCAGAAAAGTTGGAGCTAGAAAAGCAACATTG  
 AAGGAGGAAGTTAAAAAGCTGAAAAAAGAACTGGAAAATTTTGTCTTCAATTTTTTTGAAAGAAATTGAA  
 GACCTGAAGTATAATTATAAGGAAGAAGTAAAAAGAATATCCTATTAGAAGAGAAGCTAAAAAACTGT  
 CGGAACAGTTTGGATTTGAACTGCCTAGTCTTCTGCTGCTTCTGAACACTCGGAAGATGGAGAAAGTCC  
 TCATAGTTTCCCTATTTATTAGTGCCCTCGTGAACCTGCAGGTTTAAAATATTTTATGAGTGAAAAAAG  
 TTTGAGCTGGAAATCAAGCAGTCTCTGTGTTATAGAATTTACAGCTCAAAAATTTGATTTTTTTTTGTTT  
 AAAAAATCATATTTAGTTTTAACTTGTAGAAAAGTATATTTTTGAAGACTTCATTAATTTATGACTAT  
 ACAGTGCACAATGAGCTATGATAAATTAATTTTCAATAAATTAATTTTCAAAAAGCATAAAGG  
 TAAGCTTATATCAATTTACTATTTAAAATTGATTATTTTATATTTATTTTTGTTAAGATAGTCAAATC  
 CTAACGATGATTTCTATAAATACCTAGAAAACATGTTTGAAGTTGACAGGTTTTGCCAAACAGCTAGCAA  
 AATTAATGCAAACTATTCACTTAGAAAATCAATAAATCTCAACAATTAGTCCATTTTATACATCA  
 AGTATTATGCTTTGAGTCTCTCAAATTTCTGTTTATCTATTTTTGAAAAGTATTAACAAGACTGGT

**Restriction Sites:** SgfI-MluI  
**ACCN:** BC004690  
**Insert Size:** 1176 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC004690.1</a>
<b>RefSeq Size:</b>	2831 bp
<b>RefSeq ORF:</b>	1907 bp
<b>Locus ID:</b>	216274
<b>Cytogenetics:</b>	10 51.48 cM
<b>Gene Summary:</b>	<p>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 ciliar 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]</p>