

## Product datasheet for **MC218212**

### Oc90 (BC048716) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Oc90 (BC048716) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Oc90
Synonyms:	PLA2L, Ocn-95
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >BC048716  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGATTATGCTGCTCATGGTCGGTATGCTGATGGCCCCCTGTGTTGGGGCCCATGCTCTGGACACACCAA  
 ATCCCCAGGAATTGCCTCCAGGACTGTCAAAAAATATAAATATCACTTTCTTCAATGGAGTGTAAAAA  
 CGTGAAAGTGTGGCTGAAATTTTTGACTGCCTAGGTTCCCACTTCCACCTGGCTGCAAGGCTGTCTTACC  
 AACTTCCCGTGTCTCCAGTTTGTAAACAGTATGAGGTGTGTAAGTGGCCTCTGCCCCGGGACTTTG  
 AAGACTATGGTTGTGCCTGTAGGTTTGTAGATGGAAGGGATGCCTGTGGACGAGTCTGATATCTGTGCTT  
 CCAGCATCGCAGGTGCTATGAGGAAGCTTTGAGATGGACTGTCTCAAGACCCTGCCAAGCTCAGTGCA  
 GATGTGGATTGCACCAACAAACAGATCACATGTGAGTCCGAGGATCCCTGTGAGCGTCTACTGTGTACGT  
 GTGACAAGGCTGTGTGGAGTGCCTGGCTCAGTCTGGCATCAACTCCTCCCTGAACCTTCTGGATGCTTC  
 CTTCTGCCTCCCTCAGACTCCAGAGACAACTAGTGGGAAGGCTGCAACACTGTTGCCTAGAGAGTCTGTT  
 CAAGATCTTCAAGACACACAAGCTTCTAGGACCACATCAAGTCCAGGATCTGCAGAGATTATTGCCCTAG  
 CCAAAGGTACAACCCACTCTGCTGGCATCAAACCACTGAGGTTGGGAGTCTCATCTGTTGACAATGGTTC  
 CCAGGAAGCAGCTGGAAGCAGCCTGTGACAGATTGGCCTTCGTGCATCTGGGTGATGGGGACAGCATG  
 ACGGCCATGCTGCAGCTTGGAGAGATGCTTCTGTCTAACATCCCATTGCCAGAGGAATTTGAAACTT  
 ACGGCTGCTACTGTGGAAGAGAAGGAAGAGGAGAGCAAGGGACACCCTGGATAGGTGCTGTCTGTCCCA  
 TCACTGCTGTTTGGAGCAGATGAGACAAGTGGGCTGCCTCCATGGAAGGGCTTCTCAGTCATCTGTGGTA  
 TGTGAAGACCACATGGCCAAATGTGTGGGCAGAGCCTGTGTGAGAAGCTACTATGTGCCTGTGACCAGA  
 TGGCAGCTGAGTGCATGGCCTCTGCCTTCTTAAATCAAAGCCTCAAGTACCAGCGGAGCCGAGTGTCA  
 AGGCGAGCCTGTGCTGTGAGGATGGCATGCTCCAGGGCACCTTGGCCTTCTGTGGACTCCAGTTCT  
 GAGGAGAATAGTGAAGAGCTCCACCGCAGATGGAACGCCTAAGAAGATTCTGGAAGCCTCCTGGTC  
 CTTGGGGGCCAGACCCCTCGGTGGGAAATA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** BC048716

**Insert Size:** 1362 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).

**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: [BC048716](#), [AAH48716](#)

RefSeq Size: 1701 bp

RefSeq ORF: 1361 bp

Locus ID: 18256

Cytogenetics: 15 29.16 cM

**Gene Summary:** Major protein of the otoconia, a calcium carbonate structure in the saccule and utricle of the ear (PubMed:17300776). Together with OTOL1, acts as a scaffold for otoconia biomineralization: sequesters calcium and forms interconnecting fibrils between otoconia that are incorporated into the calcium crystal structure (PubMed:21655225, PubMed:24748133). Together with OTOL1, modulates calcite crystal morphology and growth kinetics (PubMed:24748133). It is unlikely that this protein has phospholipase A2 activity (PubMed:17300776).[UniProtKB/Swiss-Prot Function]