

Product datasheet for **MG216695**

Oc90 (NM_010953) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Oc90 (NM_010953) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Oc90
Synonyms:	oc95; Ocn-95; PLA2L; Pla2II
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216695 representing NM_010953
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGATTATGCTGCTCATGGTCGGTATGCTGATGGCCCCCTGTGTTGGGGCCCATGCTCTGGACACACCAA
 ATCCCCAGGAATTGCCTCCAGGACTGTCAAAAAATATAAATATCACTTTCTTCAATGGAGTGTAAAAA
 CGTGGAAGTGTGGCTGAAATTTTGAAGTGTGCTAGGTTCCCACTTCACCTGGCTGCAGGCTGTCTTCACC
 AACTTCCCGCTGCTCCTCCAGTTTGTAAACAGTATGAGGTGTGTAAGTGGCCTCTGCCCCGGGACTTTG
 AAGACTATGGTTGTGCCTGTAGGTTTGAAGTGTGAGTGGAGGATGCCTGTGGACGAGTCTGATATCTGCTGCTT
 CCAGCATCGCAGGTGCTATGAGGAAGCTGTTGAGTGGAGTGTCTCCAAGACCCTGCCAAGCTCAGTGCA
 GATGTGGATTGCACCAACAAACAGATCACATGTGAGTCCGAGGATCCCTGTGAGCGTCTACTGTGTACGT
 GTGACAAGGCTGCTGTGGAGTGCCTGGCTCAGTCTGGCATCAACTCCTCCCTGAACCTTCTGGATGCTTC
 CTTCTGCCTCCCTCAGACTCCAGAGACAACTAGTGGGAAGGCTGCAACACTGTTGCCTAGAGGGATTCTCT
 GAAAAGCCACAGATACCAAGTCAGATAGCCCTGTCAAGGAGAGTGGCTGGTGGAGTGTGAGAGCAGACACAC
 TAACAACCCTCTCCAGAACAAAGTCTGTTCAGATCTTCAAGACACACAAGCTTCTAGGACCACATCAAG
 TCCAGGATCTGCAGAGATTATTGCCCTAGCCAAAGGTACAACCCACTCTGCTGGCATCAAACCACTGAGG
 TTGGGAGTCTCATCTGTTGACAATGGTTCCAGGAAGCAGCTGGAAAAGCCTGTGACAGATTGGCCTTCG
 TGCATCTGGGTGATGGGGACAGCATGACGGCCATGCTGCAGCTTGGAGAGATGCTCTTCTGTCTAACATC
 CCATTGCCAGAGGAATTTGAACTTACGGCTGCTACTGTGGAAGAGAAGGAAGAGGAGACCAAGGGAC
 ACCCTGGATAGGTGCTGTCTGTCCATCACTGCTGTTTGGAGCAGATGAGACAAGTGGGCTGCCTCCATG
 GAAGGCGTTCTCAGTCATCTGTGGTATGTGAAGACCACATGGCCAAATGTGTGGGACAGAGCCTGTGTGA
 GAAGTACTATGTGCCTGTGACCAGATGGCAGCTGAGTGCATGGCCTCTGCCTTCTTTAATCAAAGCCTC
 AAGTCACCAGACGGAGCCGAGTGTCAAGGCGAGCCTGTGTCTGTGAGGATGGCATGCTCCAGGGCACCT
 TGGCCTCTTGTGGAAGTCCAGTTCTGAGGAGAAAGTGTGAGGAAGCTCCACCGCAGATGGAACGCCTAAG
 AAGATTCTGGAAGACCTCCTGGTCCCTTGGGGCCAGACCCCTCGGTGGGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG216695 representing NM_010953
 Red=Cloning site Green=Tags(s)

MIMLLMVGM LMAPCVGAHALDTPNPQELPPGLSKNINITFFNGVFKNVESVAEIFDCLGSHFTWLQAVFT
 NFPLLLQFVNSMRCVTGLCPDRFEDYGCACRFEMEGMPVDESICCQFQHRRCYEEAVEMDCLQDPAKLSA
 DVDCTNKQITCESEDP CERLLCTCDKAAVECLAQSGINSSLNFLDASFCLPQTPETTSKGAATLLPRGIP
 EKPTDTSQIALSGEVAGEVRADTLTTL SRTKSVQDLQDTQASRTTSSPGSAEIIALAKGTHSAGIKPLR
 LGVSSVDNGSQEAAGKACDRLAFVHLGDGDSMTAMLQLGEMLFCLTSHCPPEEFETYGCYCGREGREPRD
 TLDRCCLSHHCLEQMRQVGLHGRRSQSSVVCEDHMAKCVGQSLCEKLLCACDQMAAECMASAFFNQSL
 KSPDGAECQGEPVSCEDGMLQGT LASSVDSSSEENSEEAPPQMERLRRFLEKPPGPLGARPLGGK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_010953

ORF Size: 1455 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_010953.2](#), [NP_035083.1](#)

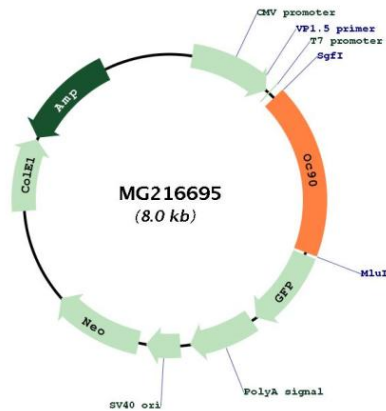
RefSeq Size: 1747 bp

RefSeq ORF: 1458 bp

Locus ID: 18256

UniProt ID:	Q9Z0L3
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]

Product images:



Circular map for MG216695