

Product datasheet for **RC221622**

OC90 (NM_001080399) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OC90 (NM_001080399) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OC90
Synonyms:	PLA2L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221622 representing NM_001080399
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCAGCTGAAGACGTTATCATCTGTGATACATTACAGCCATGTCACGTGGCCATGGCAACAGATATCA
 CTTTCTTCAGTGGGATGTTTAAAAATGTGGAAAGTGTGGCTGAAATTTTTGATTGCCTGGGCCCCACTT
 CACCTGGCTGCAGGCTGTCTTACCAATTTCCCTGTGCTGATCCAGTTTGTCAATGGTATGAAGTGTGTG
 GCTGGTCTCTGCCCCGAGACTTTGAAGACTATGGTTGCACCTGCAGTTTGAAGTGAAGGGTTGCCTG
 TGGATGAATCTGACAGCTGCTGCTTCCAGCACCGCAGGTGCTATGAGGAGGCCGTGAGATGGACTGTCT
 CCAAGACCCCGCCAAACTTAGCACAGAGGTCAATTGTGTCAGCAAGAAGATCATATGTGAGTCCAAGGAC
 AACTGTGAGCACCTGCTGTGTACCTGTGATAAGGCTGCCATAGAGTGTGGCTCGATCCAGCCTCAACT
 CTTCCCTGAACCTTCTGGACACCTCCTTCTGCCTGGCTCAGACTCCAGAGACAACCATCAAGGAAGACTT
 GACAACACTTCTGCCAGAGTGGTTCCTGTGGAGCCCACAGACACCAGCCTGACAGCCCTTTCAGGAGAA
 GTGGCTGCAGAGACTGAGGCTGACAGACTGATCACTCTCTCCAAGAAAAAGCAGGCCACGATCAGGAAG
 GAGTGGGAGCTGTAGGGCTACGTCCCCTCCAGGATCTGCAGAGATAGTTGCAACAAGGGTTACAGCTAA
 AATTGTAACCCTTGTCCCTGTGGCATTAAATCTCTGGGGCTGGCAGTGTGATCTGTTGAAAATGATCCT
 GAGGAGACCCTGAAAAAGCCTGTGACAGATTCACCTTCTGCACCTGGGAAGTGGGGACAACATGCAGG
 TGATGCCACAGCTTGAGAGATGCTCTTTTGTCTGACATCCCGGTGCCCGGAGGAATTTGAGTCTTATGG
 CTGTTACTGTGGACAAGAAGGAAGAGGGCAGCCAAGGGATGACCTAGACAGGTGCTGCTTGTCCCATCAC
 TGCTGCCTAGAGCAAGTGAAGGCTGGGCTGCCTGCTGAGAGGCTTCTTGGTACCAGGTTGGTGTGTG
 TGGATCATACGCCAAGTGTGGGGCCAAAGCCTGTGTGAGAAGTTGCTCTGTGCCTGTGACCAGCAGCC
 AGCTGAGTGCATGACCTCTGCCTCCTTTAACCAAGCCTCAAGTCCCAAGCAGACTCGGGTGCCTGGG
 CAGCCAGCAGCCTGTGAAGACAGCCTGCACCCTGTGCCCGCAGCCCCACCCTGGGCTCCAGCTCTGAGG
 AGGACAGCAGGAGGACCCTCCACAGGAGGACCTCGGCAGAGCCAAGAGGTTTCTGCGGAAGTCACTGGG
 TCCCTTGGGGATCGGGCCTCTTCATGGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221622 representing NM_001080399
 Red=Cloning site Green=Tags(s)

MAAEDVIICDTLQPCHVAMATDITFFSGMFKNVESVAEIFDCLGPHFTWLQAVFTNFPVLIQFVNGMKCV
 AGLCPRDFEDYGCTCRFEMEGLPVDESDSCCFQHRRCYEEAAEMDCLQDPAKLSTEVNVCVSKKIIICESKD
 NCEHLLCTCDKAAIECLARSSLNSSLNLLDTSFCLAQTPETTIKEDLTLLPRVVPVEPTDLSLTALSGE
 VAAETEADRLITLSKKKAGHDQEGVGAARATSPGSAEIVATRVTAKIVTLVPAGIKSLGLAVSSVENDP
 EETTEKACDRFTFLHLGSGDNMQVMPQLGEMLFCLTSRCPPEEFESYGCYCGQEGRGEPRDDLDRCLSHH
 CCLEQVRRLGCLLERLPWSPVVCVDHTPKCGGQSLCEKLLCACDQTAECMTSASFNQSLKSPSRLGCPG
 QPAACEDSLHPVPAAPTLLGSSSEEDSEEDPPQEDLGRAKRFLRKSGLPLGIGPLHGR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8005_d12.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001080399

ORF Size: 1431 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.

RefSeq: [NM_001080399.1](#), [NP_001073868.1](#)

RefSeq Size: 1434 bp

RefSeq ORF: 1434 bp

Locus ID: 729330

UniProt ID: [Q02509](#)

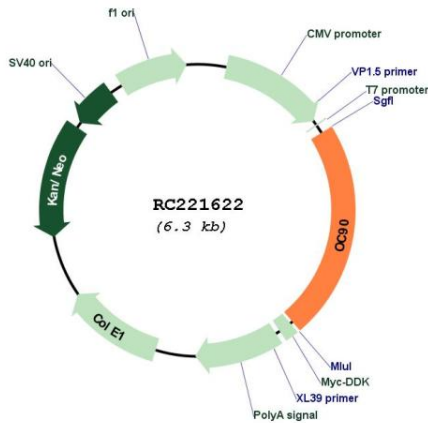
Cytogenetics: 8q24.22

Protein Families: Secreted Protein

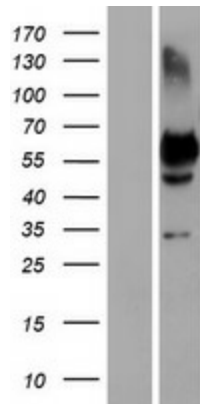
MW: 51.5 kDa

Gene Summary: Major protein of the otoconia, a calcium carbonate structure in the saccule and utricle of the ear. 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. Together with OTOL1, modulates calcite crystal morphology and growth kinetics. It is unlikely that this protein has phospholipase A2 activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221622



Western blot validation of overexpression lysate (Cat# [LY421617]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221622 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).