

Product datasheet for **RC218084**

EYA1 (NM_172060) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EYA1 (NM_172060) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EYA1
Synonyms:	BOP; BOR; BOS1; OFC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC218084 representing NM_172060
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTGCTGTTTCTCAAGTTGCAGTTAAACAGAGCCAATGAGCAGCAGTGAACAGCTTCAACGACAG
 CCGACGGGTCTTTAAACAATTTCTCAGGTTCAAGCAATTGGGAGCAGTAGTTTCAGCCACGACCAACTCA
 CCAAGTTCTCTCCACCACAGATTTACCCTTCCAACAGACCATACCCACATATTCTCCCTACCCCTTCTCA
 CAAACTATGGCTGCATATGGGCAAACACAGTTTACCACAGGAATGCAACAAGCTACAGCCTATGCCACGT
 ACCCACAGCCAGGACAGCCGTACGGCATTCTCATATGGCATCAAGACTGAAGGTGGATTGTCACAGTC
 TCAGTCACCTGGACAGACAGGATTTCTCAGCTATGGCACAAGCTTCAGTACCCCTCAACCTGGACAGGCA
 CCATACAGCTACCAGATGCAAGGTAGCAGTTTTACAACATCATCAGGAATATACAGGAAATAATTAC
 TCACAAATTCCTCTGGATTAATAGTTCACAGCAGGACTATCCGTCTTATCCAGTTTTGGCCAGGGTCA
 GTACGCACAGTATTATAACAGCTCACCGTATCCAGCACATTATATGACCAGCAGCAACACCAGCCCAACG
 ACACCATCCACCAATGCCACTTACCAGCTTCAAGAACCGCCATCTGGCATCACCAGCCAAGCAGTTACAG
 ATCCCACAGCAGAGTACAGCACAATCCACAGCCATCAACACCCATTAAGATTAGATTCTGATCGATT
 GCGTCGAGGTTAGATGGGAAATCACGTGGACGGGGCCGAAGAAACAATAATCCTTACCTCCCCAGAT
 TCTGATCTTGAGAGAGTGTTCATCTGGGACTTGGATGAGACAATCATTGTTTTCCACTCCTTGCTTACTG
 GGTCTACGCCAACAGATATGGGAGGGATCCACCCACTTCAGTTTCCCTTGGACTGCGAATGGAAGAAAT
 GATTTTCAACTTGGCAGACACATTTATTTTTAATGACTTAGAAGAATGTGACCAAGTCCATATAGAT
 GATGTTTTCTCAGATGATAACGGACAGGACCTAAGCACATATAACTTTGGAACAGATGGCTTTCCTGCTG
 CAGCAACCAGTGCTAACTTATGTTTGGCAACTGGTGTACGGGGTGGTGTGGACTGGATGAGAAGTTGGC
 CTCCCGCTACAGACGGGTAAGAGATCTACAACACCTACAAAAATAATGTTGGAGGTCTGCTTGGTCCA
 GCTAAGAGGGAAGCCTGGCTGCAGTTGAGGGCCGAAATTAAGGCCTGACCGACTCCTGGTTGACTGG
 CCCTGAAAGCACTCTCGCTCATTCACTCCCGGACAACTGTGTGAATATTTAGTAACAATACTCAGCT
 CATCCCAGCATTGGCGAAAGTCTGCTGTATGGGTTAGGAATTGTATTTCCAATAGAAAAATTTACAGT
 GCAACTAAAAAGGAAAAGAAAGCTGTTTTGAGAGAATAATTCAAAGTTTGAAGAAAAGTGGTGTATG
 TTGTTATAGGAGATGGTGTAGAAGAAGAACAAGGAGCAAAAAAGCACCGCATGCCCTTCTGGAGGATCT
 CCAGCCACTCGGACCTCATGGCCCTGCACCACGCCTTGGAACTGGAGTACCTGTAACAGCGCTCGGCACT
 TTGACAGCGCACAGCTGCTCTGTGACCAGGACAGATCCAGCAGGCCCCAGTCTCGCATCAGCGCCGGCC
 TCCAGAACTTAGCAATTCGAAGGAACACATTAACCTGGTGGATGCAGCAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218084 representing NM_172060
 Red=Cloning site Green=Tags(s)

MLLFPQVAVKTEPMSSSETASTTADGSLNNSGSAIGSSSFSPRPTHQFSPPQIYPSNRPYPHILPTPSS
 QTMAAYGQTQFTTGMQQTAYATYPQPGQPYGISSYGIKTEGGLSQSQSPGQTGFLSYGTSFSTPQPGQA
 PYSYQMGGSSFTTSSGIYTGNNSLTNSSGFNSSQQDYPSYPSFGQGQYAQYNNSSPYPAHYMTSSNTSPT
 TPSTNATYQLQEPSSGITSQAVTDPTAEYSTIHPSTPIKSDSDRLRRGSDGKSRGRGRRNNNPSPPD
 SDLERVF IWDLDETIIVFHSLLTGSYANRYGRDPPTS VSLGLRMEEMIFNLADTHLFFNDLEECDQVHID
 DVSSDDNGQDLSTYNFGTDGFPAAATSANLCLATGVRGGVDWMRKLAFRYRRVKEIYNTYKNNVGGLLGP
 AKREAWLQLRAEIEALDTSWLTALAKALSLIHSRTNCVNILVTTTQLIPALAKVLLYGLGIVFPIENIYS
 ATKIGKESCFERIIQRFGRKVYVYVIGDVEEQQGAKKARDALLEDLQPLGHPGAPRLGTGVPVTLALGT
 LTAHSCSVTRDRSSRPQSRI SAGLQNLAIRRNTLNWMMQQM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3411_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172060

ORF Size: 1803 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.

RefSeq Size: 3734 bp

RefSeq ORF: 1680 bp

Locus ID: 2138

UniProt ID: [Q99502](https://www.uniprot.org/uniprot/Q99502)

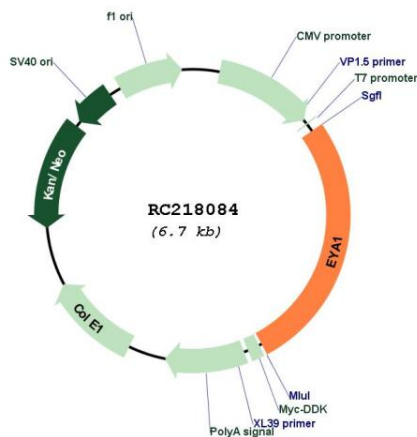
Cytogenetics: 8q13.3

Protein Families: Druggable Genome, Phosphatase, Transcription Factors

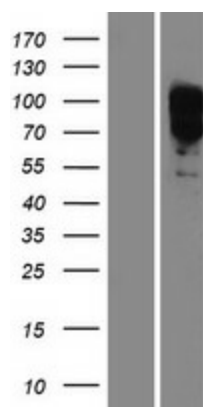
MW: 61 kDa

Gene Summary: This gene encodes a member of the eyes absent (EYA) family of proteins. The encoded protein may play a role in the developing kidney, branchial arches, eye, and ear. Mutations of this gene have been associated with branchiootorenal dysplasia syndrome, branchiootic syndrome, and sporadic cases of congenital cataracts and ocular anterior segment anomalies. A similar protein in mice can act as a transcriptional activator. Alternatively spliced transcript variants have been identified for this gene. [provided by RefSeq, Dec 2013]

Product images:



Circular map for RC218084



Western blot validation of overexpression lysate (Cat# [LY406818]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218084 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).