

Product datasheet for SC109203

EYA1 (NM_172060) Human Untagged Clone

Product data:

| | |
|---------------------------|---------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | EYA1 (NM_172060) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | EYA1 |
| Synonyms: | BOP; BOR; BOS1; OFC1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |

Fully Sequenced ORF: >OriGene sequence for NM_172060 edited
TCGAAGGAACACATTAACACTGGTGGATGCAGCAGATGTAAGCGCTGTGCAAAACATCTCAA
GCCAGTTCAGATGTTGCTGTTTCTCAAGTTGCAGTTAAAACAGAGCCAATGAGCAGCAG
TGAAACAGCTTCAACGACAGCCGACGGTCTTTAAACAATTTCTCAGTTTCAAGCAATTGG
GAGCAGTAGTTTCAAGCCACGACCAACTCACCAGTTCTCTCCACCACAGATTTACCCCTC
CAACAGACCATACCCACATATTCTCCCTACCCCTTCTCACAACATATGGCTGCATATGG
GCAAAACACAGTTTACCACAGGAATGCAACAAGCTACAGCCTATGCCACGTACCCACAGCC
AGGACAGCCGTACGGCATTCTCATATGGCATCAAGACTGAAGGTGGATTGTCACAGTC
TCAGTCACCTGGACAGACAGGATTTCTCAGCTATGGCACAAGCTTCAGTACCCCTCAACC
TGGACAGGCACCATACAGCTACCAGATGCAAGGTAGCAGTTTTACAACATCATCAGGAAT
ATATACAGGAAATAATTCACCTCACAATTCCTCTGGATTTAATAGTTCACAGCAGGACTA
TCCGCTTATCCAGTTTTGGCCAGGGTCAGTACGCACAGTATTATAACAGCTCACCGTA
TCCAGCACATTATATGACCAGCAGCAACACCAGCCCAACGACACCATCCACCAATGCCAC
TTACCAGTTCAAGAACCGCCATCTGGCATCACCAGCCAAGCAGTTACAGATCCCACAGC
AGAGTACAGCACAAATCCACAGCCATCAACACCCATTAAGATTACAGATTCTGATCGATT
GCGTCGAGGTTACAGTGGGAAATCACGTGGACGGGGCCGAAGAAACAATAATCCTTACC
TCCCCAGATTCTGATCTTGAGAGAGTGTTCATCTGGGACTTGGATGAGACAATCATTGT
TTTCCACTCCTTGCTTACTGGGTCCTACGCCAACAGATATGGGAGGGATCCACCCACTTC
AGTTTTCCCTTGGACTGCGAATGGAAGAAATGATTTTCAACTTGGCAGACACACATTTATT
TTTTAATGACTTAGAAGAATGTGACCAAGTCCATATAGATGATGTTTCTCAGATGATAA
CGGACAGGACCTAAGCACATATAACTTTGGAACAGATGGCTTTCCTGCTGCAGCAACCAG
TGCTAACTTATGTTGGCAACTGGTGTACGGGGTGGTGTGGACTGGATGAGAAAGTTGGC
CTTCCGCTACAGACGGGTAAAAGAGATCTACAACACCTACAAAAATAATGTTGGAGGTCT
GCTTGGTCCAGCTAAGAGGGAAGCCTGGCTGCAGTTGAGGGCCGAAATTGAAGCCCTGAC
CGACTCCTGGTTGACACTGGCCCTGAAAGCACTCTCGCTCATTCACTCCCGGACAAACTG
TGTGAATATTTAGTAACAACACTACTCAGCTCATCCAGCATTGGCGAAAGTCTGCTGTA
TGGTTAGGAATTGTATTTCCAATAGAAAATATTTACAGTGAACATAAAATAGGAAAAGA



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AAGCTGTTTTGAGAGAATAATTCAAAGGTTTGAAGAAAAGTGGTGTATGTTGTTATAGG
 AGATGGTGTAGAAGAAGAACAAGGAGCAAAAAAGCACGCGATGCCCTTCTGGAGGATCT
 CCAGCCACTCGGACCTCATGGCCCTGCACCACGCTTGGAACTGGAGTACCTGTAACAGC
 GCTCGGCACTTTGACAGCGCACAGCTGCTCTGTGACCAGGGACAGATCCAGCAGGCCCA
 GTCTCGCATCAGCGCCGGCTCCAGAACTTAGCAATTCGAAGGAACACATTAACCTGGT
 GATGCAGCAGATGAAGCGCTGTGCAACATCTCAAGCCAGTTCAGATGTTGCTGTTTCC
 TCAAGTTGCAGTTAAAACAGAGCCAATGAGCAGCAGTGAACACAGTTCACAGCAGCCGA
 CGGGTCTTTAAACAATTTCTCAGGTTTCAAGCAATTTGGGAGCAGTAGTTTTCAGCCCAGC
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 GCAACAAGCTACAGCCTATGCCACGTACCCACAGCCAGGACAGCCGTACGGCATTTCCTC
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 CTACGCCAACAGATATGGGAGGGATCCACCCACTTCAGTTTCCCTGGACTGCGAATGGA
 AGAAATGATTTTCAACTTGGCAGACACACATTTATTTTTAATGACTTGAAGAATGTGA
 CCAAGTCCATATAGATGATGTTTTCTTTCAGATGATAACGGACAGGACCTAAGCACATATAA
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 GAATTTAGCAATTCGAAGGAACACATTAACCTGGTGGATGCAGCAGATGTAAGCGCTGTG
 CAAACATCTCAAGCCAGTTCAGATGTTGCTGTTTCTCAAGTTGCAGTAAAAACAGAGCC
 AATGAGCAGCAGTGAACAGCTTCAACGACAGCCGACGGGTCTTTAAACAATTTCTCAGG
 TTCAGCAATTTGGGAGCAGTAGTTTCAGCCACGACCAACTCACCAAGTTCCTCCACCACA
 GATTTACCCTTCCAACAGACCATACCCACATATTCTCCCTACCCCTTCTCACAAAATAT
 GGCTGCATATGGGCAAAACAGTTTACCACAGGAATGCAACAAGCTACAGCCTATGCCAC
 GTACCCACAGCCAGGACAGCCGTACGGCATTTCCTCATATGGCATCAAGACTGAAGGTGG
 ATTGTACAGTCTCAGTACCTGGACAGACAGGATTTCTCAGCTATGGCACAAGCTTCAG
 TACCCCTCAACCTGGACAGGCACCATACAGCTACCAGATGCAAGGTAGCAGTTTTACAAC
 ATCATCAGGAATATACAGGAAATAATCACTCACAAATTCCTCTGGATTTAATAGTTC
 ACAGCAGGACTATCCGTCTTATCCCAGTTTTGGCCAGGGTCAGTACGCACAGTATTATAA
 CAGCTCACCGTATCCAGCACATTATATGACCAGCAGCAACACCAGCCCAACGACACCATC
 CACCAATGCCACTTACCAGCTTCAAGAACCGCCATCTGGCATCACAGCCAAGCAGTTAC
 AGATCCCACAGCAGAGTACAGCACAATCCACAGCCCATCAACACCCATTAAGATTTCAGA
 TTCTGATCGATTGCGTCGAGGTTTCAGATGGGAAATCACGTGGACGGGGCCGAAGAAACAA
 TAATCCTTCACTCCCCAGATTCTGATCTTGAGAGAGTGTTCATCTGGGACTTGGATGA
 GACAATCATTGTTTTCACTCCTTGCTTACTGGTCTACGCCAACAGATATGGGAGGGA

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TCCACCCACTTCAGTTTCCCTTGGACTGCGAATGGAAGAAATGATTTTCAACTTGGCAGA
CACACATTTATTTTTAATGACTTAGAAGAATGTACCAAGTCCATATAGATGATGTTTC
TTCAGATGATAACGGACAGGACCTAAGCACATATAACTTTGGAACAGATGGCTTTCCTGC
TGCAGCAACCAGTGCTAACTTATGTTTGGCAACTGGTGTACGGGGTGGTGTGGACTGGAT
GAGAAAGTTGGCCTTCCGCTACAGACGGGTAAGAGAGATCTACAACACCTACAAAAATAA
TGTTGGAGGTCTGCTTGGTCCAGCTAAGAGGGAAGCCTGGCTGCAGTTGAGGGCCGAAAT
TGAAGCCCTGACCGACTCCTGGTTGACACTGGCCCTGAAAGCACTCTCGTCATTCCTC
CCGGACAAACTGTGTGAATATTTTAGTAACAACACTACTCAGCTCATCCCAGCATTGGCGAA
AGTCTGCTGTATGGGTTAGGAATTGTATTTCCAATAGAAAATATTTACAGTGCAACTAA
AATAGGAAAAGAAAGCTGTTTTGAGAGAATAATTCAAAGGTTTGGGAAAAGTGGTGTA
TGTTGTTATAGGAGATGGTGTAGAAGAAGAACAAGGAGCAAAAAAGCACGCGATGCCCT
TCTGGAGGATCTCCAGCCACTCGGACCTCATGGCCCTGCACCACGCCTTGGAACTGGAGT
ACCTGTAAACAGCGCTCGGCACTTTGACAGCGCACAGCTGCTCTGTGACCAGGGACAGATC
CAGCAGGCCCCAGTCTCGCATCAGCGCCGCTCCAGAACTTAGCAAT
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Restriction Sites:

NotI-NotI

ACCN:

NM_172060

Insert Size:

3330 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](#)

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_172060.1](#), [NP_742057.1](#)
RefSeq Size:

3734 bp

RefSeq ORF:

1680 bp

Locus ID:

2138

UniProt ID: [Q99502](#)

Cytogenetics: 8q13.3

Protein Families: Druggable Genome, Phosphatase, Transcription Factors

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]
Transcript Variant: This variant (EYA1A) differs in the 5' UTR and lacks an exon in the 5' region, which results in translation initiation from an alternate in-frame upstream start codon compared to variant EYA1C. The resulting shorter isoform (2) has a distinct N-terminus compared to isoform 1.