

## Product datasheet for **RC219353**

### **EYA2 (NM\_005244) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	EYA2 (NM_005244) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EYA2
Synonyms:	EAB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC219353 representing NM\_005244  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTAGAACTAGTGATCTCACCAGCCTCACTGTAACACAGCATTGTCTGGATAAACTGAAGTTTAACC  
 GTGCTGACGCTGCTGTGTGGACTCTGAGTGACAGACAAGGCATCACCAAATCGGCCCCCTGAGAGTGTC  
 CCAGCTCTTCTCCAGATCTTGCCACGTGTCTCCCCCGCCAGCCTTCCACAGCCATGGCAGCCTACGGC  
 CAGACGCAGTACAGTGCGGGGATCCAGCAGGCTACCCCTATACAGTTACCCACCTCCAGCACAAGCCT  
 ATGGAATCCCTTCTACAGCATCAAGACAGAAGACAGCTTGAACCATTCCCCTGGCCAGAGTGGATTCTT  
 CAGCTATGGTCCAGTTCAGCACCTCACCCTGGACAGAGCCATACACCTACCAGATGCACGGCACA  
 ACAGGGTTCTATCAAGGAGGAAATGGACTGGGCAACGCAGCCGGTTTCGGGAGTGTGCACCAGGACTATC  
 CTTCTACCCCGCTTCCCCAGAGCCAGTACCCAGTATTACGGCTCATCTACAACCCTCCCTACGT  
 CCCGGCCAGCAGCATCTGCCCTTCGCCCTCTCCAGTCCACCTACGTCTCCAGGAGGCATCTCACAAC  
 GTCCTCAACCAGAGTTCCGAGTCACTTGTGTTGAATACAACACACAAATGGACCTTCCACACCAGCGA  
 AAGAGGGAGACACAGACAGGCCGACCCGGCTCCGACGGGAAGCTCCGAGGCCGGTCTAAGAGGAGCAG  
 TGACCCGTCGCCGAGGGGACAATGAGATTGAGCGTGTGTTCTGTGGGACTTGGATGAGACAATAATT  
 ATTTTTCACTCCTTACTCACGGGACATTTGCATCCAGATACGGGAAGGACACCAGCCTCCGTGCGCA  
 TTGGCCTTATGATGGAAGAGATGATCTCAACCTTGACAGATACACATCTGTTCTTCAATGACCTGGAGGA  
 TTGTGACCAGATCCACGTTGATGACGTCTATCAGATGACAATGGCCAAGATTTAAGCACATACTTCTC  
 TCCGCTGACGGCTTCCACAGTTCGGCCCCAGGACCAACCTGTGCTGGGCTTGGCGTGCACGGCGCG  
 TGGACTGGATGAGGAAGCTGGCCTTCGCTACCGCGGGTGAAGGAGATGTACAATACCTACAAGAACAA  
 CGTTGGTGGTTGATAGGCACTCCAAAAGGAGACCTGGCTACAGCTCCGAGCTGAGCTGGAAGCTCTC  
 ACAGACCTCTGGCTGACCACTCCCTGAAGGCACTAAACCTCATCAACTCCCGGCCAACTGTGTCAATG  
 TGCTGGTCAACCACCTCAACTAATTCCTGCCCTGGCCAAAGTCTGCTATATGGCTGGGGTCTGTGTT  
 TCCTATTGAGAACATCTACAGTGAACCAAGACAGGGAAGGAGAGCTGCTTCGAGAGGATAATGCAGAGA  
 TTCGGCAGAAAAGCTGTCTACGTGGTATCGGTGATGGTGTGGAAGAGGAGCAAGGAGCGAAAAAGCACA  
 ACATGCCTTTCTGGCGGATATCTGCCACGCAGACCTGGAGGCACTGAGGCACGCCCTGGAGCTGGAGTA  
 TTTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC219353 representing NM\_005244  
 Red=Cloning site Green=Tags(s)

MVELVISPLTVNSDCLDKLKFNRADA AVWTLSDRQGITKSAPLRVSQLFSRSCPRLPRQPSTAMAAYG  
 QTQYSAGIQQATPYTAYPPPAQAYGIPSYSIKTEDSLNHSPGQSGFLSYGSSFSTSPGQSPYTYQMHT  
 TGFYQGGNGLGNAAGFGSVHQDYPSPGFPQSQYPQYYGSSYNPPYVPASSICPSPLSTSTYVYLQEASHN  
 VPNQSSSLAGEYNTHNGPSTPAKEGDTDRPHRASDGKLRGRSKRSDPSPAGDNEIERVFVWLDDETHI  
 IFHSLLTGTFASRYGKDTTTSVRIGLMMEEMIFNLADTHLFFNDLEDQDIHVDDVSSDDNGDLSTYNF  
 SADGFHSSAPGANLCLGSGVHGGVDWMRKLAFRYRRVKEMYNTYKNNVGLIGTPKRETWLQLRAELEAL  
 TDLWLTHSLKALNLSRPNVCNVLVTTTQLIPALAKVLLYGLGSVFPIENIYSATKTGKESCFERIMQR  
 FGRKAVYVVIGDVEEEQGAKKHNPFWRISCHADLEALRHAELEYL

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_005244

**ORF Size:** 1614 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](mailto: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.

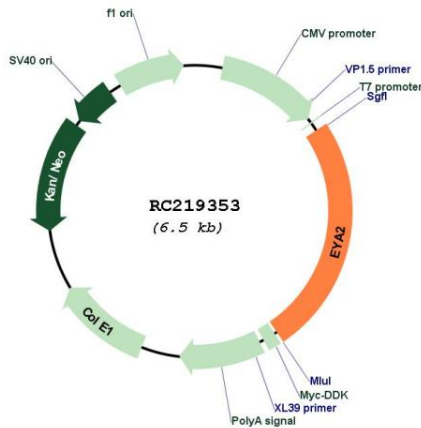
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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:** [NM\\_005244.5](#)  
**RefSeq Size:** 2702 bp  
**RefSeq ORF:** 1617 bp  
**Locus ID:** 2139  
**UniProt ID:** [O00167](#)  
**Cytogenetics:** 20q13.12  
**Protein Families:** Phosphatase, Transcription Factors  
**MW:** 59.7 kDa

**Gene Summary:** This gene encodes a member of the eyes absent (EYA) family of proteins. The encoded protein may be post-translationally modified and may play a role in eye development. A similar protein in mice can act as a transcriptional activator. Alternative splicing results in multiple transcript variants, but the full-length nature of all of these variants have not yet been determined. [provided by RefSeq, Jul 2009]

### Product images:



Circular map for RC219353