

Product datasheet for **RG221561**

EYA1 (NM_172058) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EYA1 (NM_172058) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EYA1
Synonyms:	BOP; BOR; BOS1; OFC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221561 representing NM_172058
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAATGCAGGATCTAACAGCCCGCATAGCCGCTGAGTGGTAGTAGTGAATCCCCAGTGGCCCCA
 AACTCGGTAACCTCATATAAATAGTAATTCATGACTCCAATGGCACCGAAGTTAAAACAGAGCCAAT
 GAGCAGCAGTGAACAGCTTCAACGACAGCCGACGGGTCTTTAAACAATTTCTCAGGTTACGAATTGGG
 AGCAGTAGTTTACAGCCACGACCAACTCACCAGTTCTCTCCACCACAGATTTACCCTTCCAACAGACCAT
 ACCCACATATTCTCCCTACCCCTTCTCACAACTATGGCTGCATATGGGCAAACACAGTTTACCACAGG
 AATGCAACAAGCTACAGCCTATGCCACGTACCCACAGCCAGGACAGCCGTACGGCATTCTCTCATATGGT
 GCATTGTGGGCAGGCATCAAGACTGAAGGTGGATTGTCACAGTCTCAGTCACCTGGACAGACAGGATTTT
 TCAGCTATGGCACAAGCTTCAGTACCCCTCAACCTGGACAGGCACCATACAGCTACCAGATGCAAGGTAG
 CAGTTTTACAACATCATCAGGAATATACAGGAAATAATCACTCACAAATTCCTCTGGATTTAATAGT
 TCACAGCAGGACTATCCGTCTTATCCCAGTTTTGGCCAGGGTCAGTACGCACAGTATTATAACAGCTCAC
 CGTATCCAGCACATTATATGACCAGCAGCAACACCAGCCCAACGACACCATCCACCAATGCCACTTACCA
 GCTTCAAGAACCGCCATCTGGCATCACCAGCCAAGCAGTTACGGATCCCACAGCAGAGTACAGCACAAATC
 CACAGCCCATCAACCCATTAAAGATTAGATTCTGATCGATTGCGTCGAGGTTTACAGTGGGAAATCAC
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 GGACTTGGATGAGACAATCATTGTTTTCCACTCCTTGCTTACTGGGTCTACGCCAACAGATATGGGAGG
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 TATTTTTAATGACTTGAAGAATGTGACCAAGTCCATATAGATGATGTTTCTTCAGATGATAACGGACA
 GGACCTAAGCACATATAACTTTGGAACAGATGGCTTTCCCTGCTGCAGCAACCAGTGTCTAATTATGTTTG
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 TCTACAACACCTACAAAAATAATGTTGGAGGTCTGCTTGGTCCAGCTAAGAGGGAAGCCTGGCTGCAGTT
 GAGGGCCGAAATTGAAGCCCTGACCGACTCCTGGTTGACACTGGCCCTGAAAGCACTCTCGCTCATTAC
 TCCCGGACAACTGTGTGAATTTTTAGTAACTACTCAGCTCATCCCAGCATTGGCGAAAGTCTCTGC
 TGTATGGTTAGGAATTGATTTCCAATAGAAAATTTTACAGTGAACATAAAATAGGAAAAGAAAGCTG
 TTTTGAGAGAATAATTCAAAGGTTTGAAGAAAAGTGGTGTATGTTGTTATAGGAGATGGGTAGAAAGAA
 GAACAAGGAGCAAAAAGCACGGATGCCCTTCTGGAGGATCTCCAGCCACTCGGACCTCATGGCCCTGC
 ACCATGCCTTGGAACTGGAGTACCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221561 representing NM_172058
 Red=Cloning site Green=Tags(s)

MEMQDLTSPHSRLSGSSESPSGPKLGNSHINSNSMTPNGTEVKTEPMSSSETASTTADGSLNNSGSAIG
 SSSFSPRPTHQFSPPQIYPSNRPYPHILPTSSQTMAAYGQTQFTTGMQQATAYATYPQGQPYGISSYG
 ALWAGIKTEGGLSQSQSPGQTGFLSYGTSFSTPQPGQAPYSYQMQGSSFTTSSGIYTGNNSLTNSGFFNS
 SQQDYPSYPSFGGQYAQYNNSSPYPAYHMTSSNTSPTTPSTNATYQLQEPSPGITSQAVTDPTAEYSTI
 HSPSTPIKSDSDRLRRGSDGKSRGRRRNNNSPPPDSLERVFIWDLDETIIVFHSLLTGSYANRYGR
 DPPTSIVSLGLRMEEMIFNLADTHLFFNDLEECDQVHIDVSSDDNGQDLSTYNFGTDGFPAAATSANLCL
 ATGVRGGVDWMRKLAFRYRRVKEIYNTYKNNVGGLLGPAKREAWLQLRAEIEALTDSWLTALKALSLIH
 SRTNVCNILLVTTTQLIPALAKVLLYGLGVFPIENIYSATKIGKESCFERIIQRFGRKVVVVIGDGVVEE
 EQGAKKHAMPFWRISSHSMLMALHHALELEYL

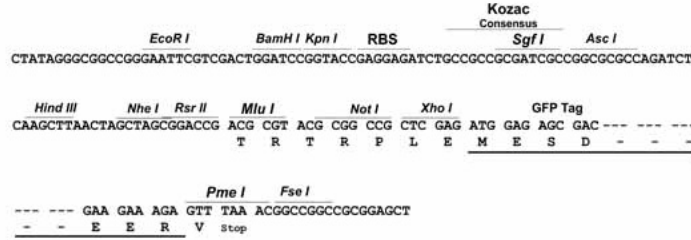
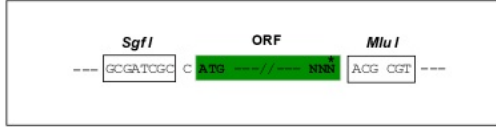
TRTRPLE - GFP Tag - V

Restriction Sites:

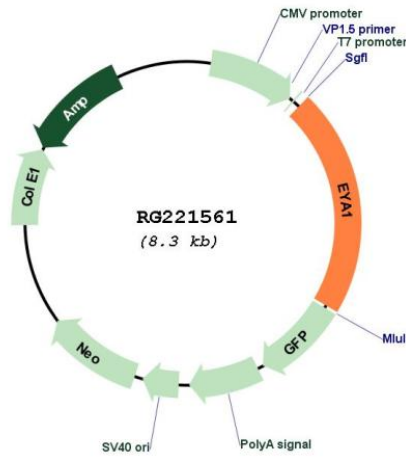
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_172058
 ORF Size: 1776 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:	<ol style="list-style-type: none">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_172058.1 , NP_742055.1
RefSeq Size:	3862 bp
RefSeq ORF:	1779 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]