

Product datasheet for **RC238699**

EYA3 (NM_001282562) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EYA3 (NM_001282562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EYA3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238699 representing NM_001282562
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACATGCACCGATTACATCCCTCGCTCATCCAATGATTATACCTCACAAATGTATTCTGCAAAACCTT
 ATGCACATATTCTCTCAGTTCCTGTTTCGAAACTGCTTACCCTGGACAGACTCAATACCAGACACTACA
 GCAGACTCAACCCATGCTGTCTACCCTCAGGCAACCCAAACGTATGGACTACCTCCTTTTGGTGCATTG
 TGGCCAGGTATGAAACCTGAAAGTGGTTTAATTCAGACTCCATCTCCAAGTCAACACAGTGTCTTACCT
 GCACTACAGGGTTAACCACAAGCCAGCCAGCCAGCACATTATCTTATCCATTCAAGCTTCAAGCAC
 AAATGCCAGCCTGATATCTACTTCTTCTACAATTGCCAATATTCCAGCAGCAGCAGTAGCCAGCATCTCA
 AACCAGGATTATCCACCTATACTATTCTTGGTCAGAATCAGTACCAGGCCTGCTACCCAGCTCCAGCT
 TTGGAGTCACAGGTCAGACTAACAGTGATGCAGAGAGCACCACATTAGCAGCAACCACATACCAGTCGGA
 GAAGCCTAGTGTATGGCGCTGCACCTGCAGCACAGAGACTTCTCTGGAGACCTTCTACAAGTCCA
 TCTTTGTCCCAGACTACACCAAGTAAAGATACTGATGATCAGTCCAGGAAAAACATGACTAGCAAGAACC
 GGGCAAGAGGAAAGCTGATGCCACTTCTCCCAAGACAGTGAATTAGAACGGGTATTTCTGTGGGACTT
 GGATGAAACCATCATCATCTTCCACTCACTTCTTACTGGATCCTATGCCAGAAATATGAAAGGACCCA
 ACAGTAGTGATTGGCTCAGGTTTAACAATGGAAGAAATGATTTTTGAAGTGGCTGATACTCATCTATTTT
 TCAATGACTTAGAGGAGTGTGACCAGGTACATGTGGAAGATGTGGCTTCTGATGACAATGGCCAAGACTT
 GAGCAACTACAGTTTCTCAACAGATGGTTTCAGTGGCTCAGGAGGTAGTGGCAGCCATGGTTCATCTGTG
 GGTGTTACAGGAGGTGTGGACTGGATGAGGAAACTAGCTTCCGCTACCGGAAAGTGAAGAAATCTATG
 ATAAGCATAAAAGCAACCTGGTCTCTCAGTCCCCAGAGGAAGCACTGCAGAGATTAAGAGC
 AGAAATTGAAGTTTTAACAGATTCTGGTTAGGAAGTGCATTAAGTCCTTACTTCTCATCCAGTCCAGA
 AAGAATTGTGTAATGTTCTGATCACTACCACCCAGCTGGTTCAGCCCTGGCCAAGTTCTCCTATATG
 GACTAGGAGAAATATTTCTATTGAGAATCTATAGTGTACCAAAAATTGGTAAGGAGAGCTGCTTTGA
 GAGAATTGTGTAAGTTTGGAAAGAAAGTCACATATGTAGTATTGGAGATGGACGAGATGAAGAAATT
 GCAGCCAAACAGCACAAACATGCCTTCTGGAGGATCACAAACCATGGAGACCTAGTATCCCTTACCAGG
 CTTTAGAGCTTGATTTTCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238699 representing NM_001282562
 Red=Cloning site Green=Tags(s)

MTCTDIYIPRSSNDYTSQMYSAKPYAHILSVPVSETAYPGQTQYQTLQQTQPYAVYPQATQTYGLPPFGAL
 WPGMKPESGLIQTSPSPQHSVLCTTGLTTSQPSPAHYSYPIQASSTNASLISTSSTIANIPAAAVASIS
 NQDYPTYTILGQNQYQACYPSSSFVGTQNSDAESTTLAATTYQSEKPSVMAPAPAAQRLSSGDPSTSP
 SLSQTTSPKDDQSRKNMSTKNRGRKADATSSQDSELERVFLWDLDETIIFHSLLTGSAQKYGKDP
 TVVIGSGLTMEEMIFEVADTHLFFNDLEECDQVHVEDVASDDNGQDL SNYSFSTDGFSGSGGSGSHGSSV
 GVQGGVDWMRKLAFRYRKVREIYDKHKS NVGGLLSPQRKEALQRLRAEIEVL TDSWLG TALKSLLL IQSR
 KNCVNVLI TTTQLVPALAKVLLYGLGEIFPIENIYSATKIGKESCFERIVSRFGKKVTVYVIGDGRDEEI
 AAKQHNMPFWRITNHGDLVSLHQALELDFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

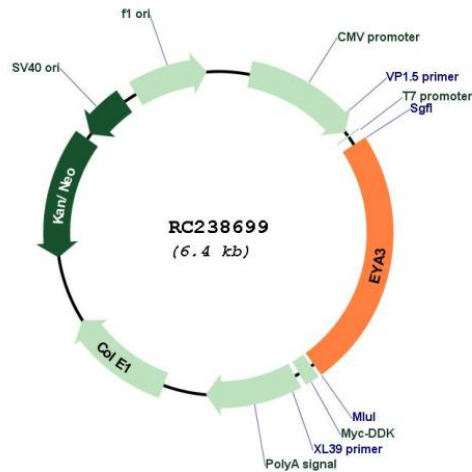
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001282562

ORF Size: 1560 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_001282562.1](#), [NP_001269491.1](#)

RefSeq Size: 5961 bp

RefSeq ORF: 1563 bp

Locus ID: 2140

UniProt ID: [Q99504](#)

Cytogenetics: 1p35.3

Protein Families: Phosphatase, Transcription Factors

MW: 57.3 kDa

Gene Summary: This gene encodes a member of the eyes absent (EYA) family of proteins. The encoded protein may act as a transcriptional activator and have a role during development. It can act as a mediator of chemoresistance and cell survival in Ewing sarcoma cells, where this gene is up-regulated via a micro-RNA that binds to the 3' UTR of the transcript. A similar protein in mice acts as a transcriptional activator. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Sep 2013]