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Product datasheet for RG238989

EYA4 (NM_001301012) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EYA4 (NM_001301012) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EYA4
Synonyms:	CMD1J; DFNA10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG238989 representing NM_001301012.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAAGACTCCCAGGATTTAAATGAACAATCAGTAAAGAAAACGTGCACAGAATCAGATGTTTCACAA
TCTCAGAATTCCAGGTCTATGGAAATGCAGGACCTAGCAAGTCCTCATACTCTTGTTGGAGGTGGTGAT
ACTCCAGGTAGCTCCAAACTGGAAAAATCTAATCTCAGCAGCACATCAGTTACTACAAATGGGACAGGA
GTAATTACAAGTAGTGGCTACAGCCCCAGATCAGCACATCAGTATTCCCCACAGCTGTATCCTTCCAAG
CCCTATCCACACATTCTTTCTACACCAGCAGCTCAAACAATGTCTGCCTATGCAGGCCAGACTCAGTAT
TCGGGGATGCAGCAGCCAGCCGTCTACACAGCCTACTCACAGACAGGACAGCCCTACAGCTTGCCCACT
TACGATTTGGGTGTGATGTTGCCAGCCATCAAGACAGAGAGTGGACTTTCCCAAACTCAGTCCCCATTA
CAGAGTGGCTGCCTCAGTTACAGCCCAGGGTTCTCTACCCCACAGCCAGGCCAGACACCTTATTCTTAC
CAAATGCCAGGTTCTAGTTTTGCACCATCATCTACTATTTATGCAAATAATTCAGTTTCCAATTCAACG
AATTTCAGTGGTTCACAACAGGATTATCCATCCTATACAGCCTTTGGCCAAAACCAGTATGCACAGTAT
TATTCAGCATCAACGTATGGAGCGTATATGACATCGAATAACACAGCCGATGGCACACCCTCTTCAACC
TCTACTTATCAGTTGCAGGAATCTCTCCCAGGACTGACTAACCAACCAGGAGAGTTCGATACCATGCAG
AGTCCCTCCACACCCATCAAAGATCTTGATGAGAGAACCTGTAGGAGTTCTGGGTCAAAGTCCAGAGGA
AGAGGCCGGAAAAATAATCCCTCCCCGCCTCCTGATAGTGACCTGGAGCGTGTGTTTGTCTGGGATTTG
GATGAAACCATCATTGTTTTTCACTCACTGCTCACCGGGTCTTATGCACAGAAGTATGGCAAGGATCCC
CCCATGGCTGTAACCCTTGGACTCCGCATGGAAGAAATGATTTTTAATCTTGCTGATACTCATTTGTTT
TTTAATGATTTAGAGGAGTGTGATCAAGTTCATATAGATGATGTTTCCTCTGATGATAATGGGCAGGAC
TTAAGTACCTACAGTTTTGCAACTGATGGCTTCCATGCAGCTGCAAGTAGTGCAAACCTTTGTTTGCCA
ACAGGTGTAAGAGGAGGGGTTGACTGGATGAGGAAGTTGGCTTTTCGTTACAGAAGAGTAAAAGAATTA
TATAACACCTACAAGAACAACGTTGGAGGACTCCTTGGCCCTGCCAAGAGGGATGCCTGGCTACAGTTA
AGGGCAGAGATTGAAGGTCTGACAGATTCCTGGCTAACAAATGCACTTAAGTCTTTATCAATTATTAGC
ACTAGGAGTAACTGCATAAATGTCTTGGTAACGACAACTCAACTGATCCCAGCACTTGCGAAGGTTCTA
CTCTATAGTTTAGGAGGTGCTTTCCCCATTGAGAATATTTACAGTGCAACTAAAATAGGCAAGGAAAGC
TGTTTTGAGCGTATAGTGTCCAGATTTGGCACTAACATAACTTATGTTGTGATTGGAGATGGCCGAGAT
GAGGAGCATGCCGCTAACCAGCACAACATGCCCTTCTGGAGGATATCCAGTCACTCAGACCTCCTGGCT
CTCCACCAAGCACTGGAATTAGAGTATTTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

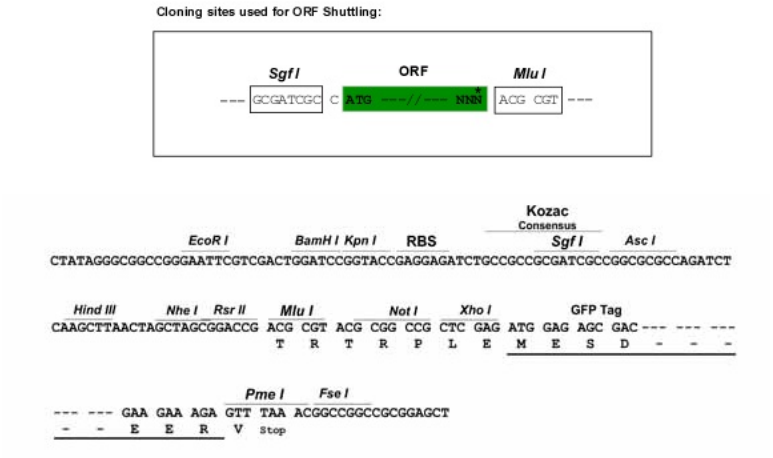
Protein Sequence:

>Peptide sequence encoded by RG238989
Blue=ORF Red=Cloning site Green=Tag(s)

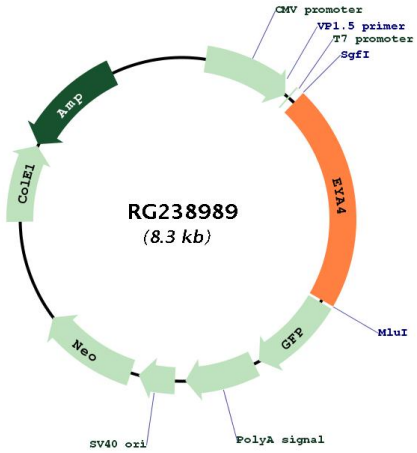
MEDSQDLNEQSVKKTCTESDVSQSQNSRSMEMQDLASPHTLVGGGDTPGSSKLEKSNLSSTSVTTNGTG
VITSSGYSPRSAHQYSPQLYPSKPYPHILSTPAAQTMSAYAGQTQYSGMQQPAVYTAYSQTGQPYSLPT
YDLGVMLPAIKTESGLSQTQSPLQSGCLSYSPGFSTPQPGQTPYSYQMPGSSFAPSSTIYANNSVSNST
NFSGSQQDYPSYTAFGQNQYAQYYSASTYGAYMTSNNTADGTPSSTSTYQLQESLPGLTNQPGEFDTMQ
SPSTPIKDLDERTCRSSGSKSRGRGRKNNPSPPPDSDLERVFVWDLDETIIVFHSLLTGSYAQKYGKDP
PMAVTLGLRMEEMIFNLADTHLFFNDLEECDQVHIDDVSSDDNGQDLSTYSFATDGFHAAASSANLCLP
TGVRGGVDWMRKLAFRYRRVKELYNTYKNNVGGLLGPAKRDAWLQLRAEIEGLTDSWLTNALKSLSIIS
TRSNCINVLVTTTQLIPALAKVLLYSLGGAFPIENIYSATKIGKESCFERIVSRFGTNITYVVIGDGRD
EEHAANQHNMPFWRISSHSDLLALHQALELEYL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001301012

ORF Size: 1755 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).
RefSeq:	NM_001301012.1, NP_001287941.1
RefSeq Size:	5393 bp
RefSeq ORF:	1758 bp
Locus ID:	2070
UniProt ID:	O95677
Cytogenetics:	6q23.2
Protein Families:	Druggable Genome, Phosphatase, Transcription Factors
MW:	64.4 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 through its protein phosphatase activity, and it may be important for eye development, and for continued function of the mature organ of Corti. Mutations in this gene are associated with postlingual, progressive, autosomal dominant hearing loss at the deafness, autosomal dominant non-syndromic sensorineural 10 locus. The encoded protein is also a putative oncogene that mediates DNA repair, apoptosis, and innate immunity following DNA damage, cellular damage, and viral attack. Defects in this gene are also associated with dilated cardiomyopathy 1J. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2014]