

Product datasheet for **MR215832**

Eya4 (NM_010167) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eya4 (NM_010167) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eya4
Synonyms:	B130023L16Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR215832 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGACACCCAGGACCTAAATGAGCAATCTGTAAAGAAAACGTGCCAGAAGCAGATGTTTCGGAAC
 CTCAGAATTCCAGGTCTATGAAAATGCAAGACCTAGCAAGTCCCCATGCCTTGGTTGGAGGCAGTGATAC
 ACCTGGGAGCTCCAAGCTGGATAAATCTGGTCTCAGCAGCACTTCAAGTCAACAACAAATGGGACAGGAGTG
 TCTCTTCTGAGTCAAAACAGAGCCCTTGACAGCAGTGAAGTCCACTACCAGACTGGAGATGGAGCGC
 TTGACACTTTTACTGGGTGAGTAATAACAAGCAGCGGCTACAGCCCAGGTGGCGCAGCAGTACTCTCC
 ACAGCTGTACCCCTCAAGCCCTATCCACACATCTTTTCTACACCAGCAGCTCAAACAATGTCGGCTAT
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 CCTACAGCCTGCCTGCCTACGATCTTGGTGTGATGTTGCCAGCCATCAAGACGAAAAGTGGGCTTTCCCA
 AACTCAGTCCCCGTTACAGAGTGGCTGCCTGAGCTACAGCCCTGGTTTTCTACCCACAGCCAGGCCAG
 ACGCCTTACTCTTACCAATGCCAGTTCCAGCTTGCACCATCGTCTACTATTTATGCAATAATTCCG
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 TGCTTTGAGCGAATAATGCAAAGTTTGGCAGAAAAGTAGTGTATGTTGTAATTGGGGATGGTGTAGAAG
 AAGAGCAGGCAGCAAAAAGCACAAACATGCCCTTTTGGAGGATATCAAGCCACTCGGACCTCTTGGCTCT
 ACATCAAGCACTGGAATTAGAGTATTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

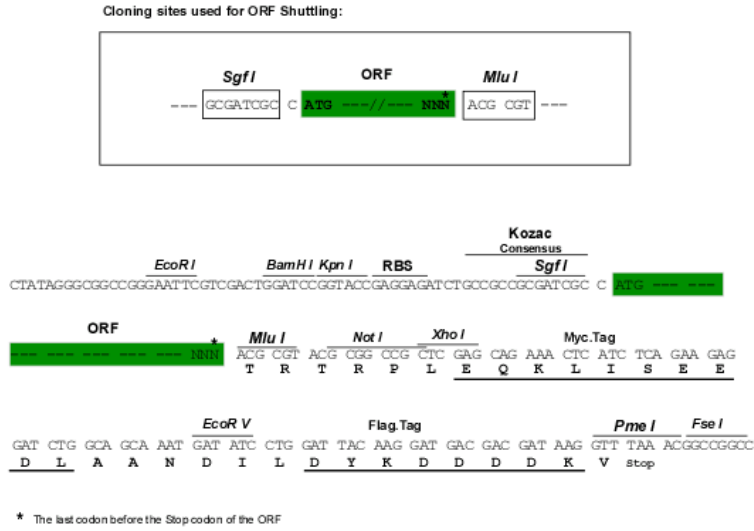
>MR215832 protein sequence
 Red=Cloning site Green=Tags(s)

MEDTQDLNEQSVKKTCPADVSEPNRSRMEMQDLASPHALVGGSDTPGSSKLDKSGLSSTSVTTNGTGV
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 WDLDETIIVFHLLTGSYAQYKGDPPMAVTLGLRMEEMIFNLADTHLFFNDLEECDQVHIDVSSDDNG
 QDLSTYSFATDGFHAAAANLCLPTGVRGGVDWMRKLAFRYRRVKELYNTYKNNVGGLLGPAKRDAWLQ
 LRAEIEGLTDSWLTNALKSLSIISTRNVCVNVLTQTQLIPALAKVLLYSLGGAFPNIENIYSATKIGKES
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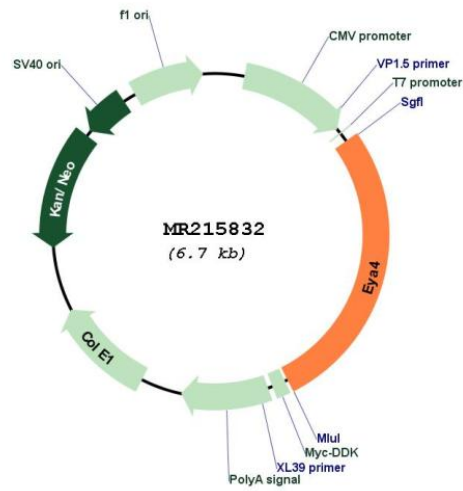
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_010167

ORF Size: 1851 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_010167.2 , NM_010167.3 , NM_010167.4 , NM_010167.5 , NP_034297.2
RefSeq Size:	4099 bp
RefSeq ORF:	1851 bp
Locus ID:	14051
Cytogenetics:	10 10.44 cM
MW:	67 kDa
Gene Summary:	Tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph). 'Tyr-142' phosphorylation of histone H2AX plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress. Promotes efficient DNA repair by dephosphorylating H2AX, promoting the recruitment of DNA repair complexes containing MDC1. Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. May be involved in development of the eye (By similarity).[UniProtKB/Swiss-Prot Function]