

Product datasheet for **MG218788**

Eya3 (NM_211357) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eya3 (NM_211357) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Eya3
Synonyms:	A1844637
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218788 representing NM_211357 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATTACCTCACAAATGTATTCTGCAAACCTCAAGCACAAATGCCAGCCTGATACCCACTTCATCTG
CAATTGCCAATATCCAGCAGCAGCTGTGGCCAGCATCTCAAACCAGGATTATCCCACCTATACTATTCT
TGGACAGAATCAGTACCAGGCCTGCTACCCAGTTCAGCTTTGGAGTCACAGGTCAGACTAACAGTGAT
GCTGAGACCACAACATTAGCAGCTACAACATACCAGACGGAGAAGCCTAGTGCTATGGTGCCTGCACCAG
CCACACAGAGGCTTCCCTCCGACTCCTCTGCAAGCCACCTTTGTCCCAGACTACACAAATAAAGATGC
TGATGATCAGGCCAGGAAAACATGACTGTCAAGAACCGGGGCAAGAGGAAAGCTGATGCCAGCTTCC
CAGGACAGTGAATTGGAACGGGTATTTCTCTGGGACTTGGACGAAACCATCATCATCTTTTATTCCCTTC
TCACTGGATCCTATGCTCAGAAGTATGGAAGGACCCAACAGTAGTAATTGGCTCAGGTTAAACCATGGA
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AGCCCCAGAGGAAGGAAGCACTGCAGAGACTCAGAGCAGAGATCGAGGTGCTGACGGACTCCTGGTTAG
GAATGCGCTCAAGTCTTCTTCTCATCCAGTCTCGAAAGAAGTGTGCGAATGTTCTGATCACTACCAC
CGAGTTGGTTCAGCCCTGGCCAAGTTCCTGTATGGACTAGGAGAGATATTTCTATTGAAAACATC
TACAGTGTACAAAATCGGTAAGGAGAGCTGCTTTGAGAGAATTGTTTCGAGGTTTGGGAAAAAGTCA
CATATGTAGTGATTGGAGATGGACGAGATGAAGAAATTGCAGCCAAGCAGCACAAACATGCCCTTCTGGAG
GATCACAACCACGGAGATCTGGTGTCCCTGCACCAGGCTTTAGAGCTTGACTTCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG218788 representing NM_211357
Red=Cloning site Green=Tags(s)

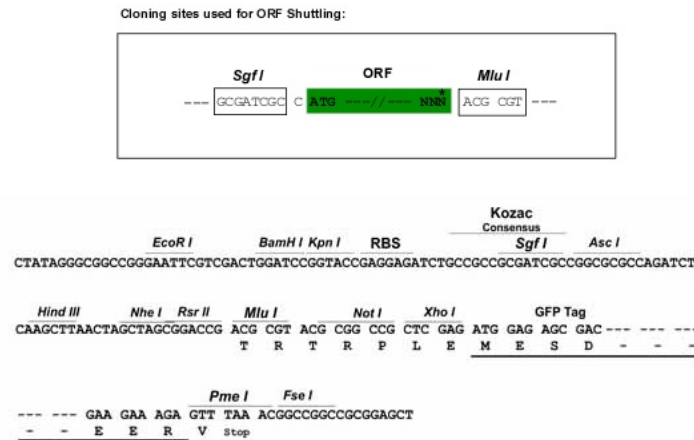
MIIPHKCILQTSSTNASLIPTSSAIANIPAAAVASISNQDYPTYTILGQNQYQACYPSSSFGVTGQTNSD
 AETTTLAATTYQTEKPSAMVPAPATQRLPSDSSASPLSQTTPNKDADDQARKNMTVKNRGKRKADASS
 QDSELERVFLWLDDETIIFHSLLTGSYAQKYGKDPVVIGSGLTMEEMIFEVADTHLFFNDLEECDQVH
 VEDVASDDNGQDL SNYSFSTDGFSGSGSGSHGSSVGVQGGVDWMRKLAFRYRKVREIYDKHKS NVGGLL
 SPORKEALQRLRAEIEVL TDSWLTALKSLLL I QSRKNCANVLITTTQLVPALAKVLLYGLGEIFPIENI
 YSATKIGKESCFERIVSRFGKKVTVVYVIGDGRDEEIAAKQHNPFWRITNHGDLVSLHQALELDFL

TRTRPLE - GFP Tag - V

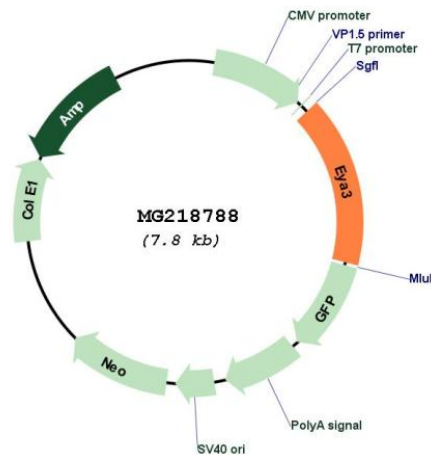
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_211357

ORF Size:	1248 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_211357.2
RefSeq Size:	4994 bp
RefSeq ORF:	1251 bp
Locus ID:	14050
Cytogenetics:	4 65.68 cM
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 (By similarity). Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. The phosphatase activity has been shown in vitro. Coactivates SIX1. Seems to coactivate SIX2, SIX4 and SIX5. The repression of precursor cell proliferation in myoblasts by SIX1 is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex and seems to be dependent on EYA3 phosphatase activity. May be involved in development of the eye. May play a role in mediating the induction and differentiation of cranial placodes.[UniProtKB/Swiss-Prot Function]