

Product datasheet for **MG216329**

Tyw5 (NM_001037742) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tyw5 (NM_001037742) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tyw5
Synonyms:	1110034B05Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216329 representing NM_001037742 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCTGAGCAGCATCTTCGGTACCCCGGCTGCGGGCGTCTCCGGGAGCAGTTCATGGAGCATCTTT
 ATCCACAGAGAAAGCCTCTTGTTGGAAGGACTCGACTTAGGATCTGTACAAGCAAATGGACAGTGGA
 TTACCTGAGTCAAGTTGGAGGAACGAAAGAAGTAAAAATTCACGTTGCTGCAGTTCACAGATGGACTTC
 ATTAGTAAGAATTTGTCTATAGAACTTTACCTTTTAACAAGTTGGTCCAGAGAGCAGCCGAAGAAACAC
 ATAAAGAATTCTTCATTTAGAGGATGAGAAATACTACTTACGGTCACTTGGAGAAGACCAAGGAAGGA
 TGTTCAGACATCAGACAGCAGTTCATCATTAGGAGGAGATATTACATTTCCAATGTTCTTCAGAGAG
 GAGCAGTCTTTTTCCAGTGTTTTTCGAATTAGTTCACCTGGATTACAGCTCTGGACTCACTATGATGTAA
 TGGATAACTTTTTAATACAAGTGACAGGAAAGAAGCGAATTACACTGTTCAATCCTCGGGATGCACAATA
 TTTATATTTATCAGGTTCTAAATCAGAAGTGCTGAATATCGACAGCCAGACCTGGATAAATACCCACTC
 TTTCTAAAGCAAGGAGGTATGAGTGCTCCCTGGAAGCTGGAGATGTCTCTTCATTCTGCTTTATGGT
 TCCATAATGTAGTTTCTGAAGAGTTTGGAGTGGGGTGAATATCTTCTGGAAGCACCTTCCATCGGAATG
 CTATGACACAACAGATACCTATGGCAACAAAGATCCTGTAGCGGCATCCAGAGCTGTGCAGATCTTGGAC
 AGAGCTTTGAAAACACTGGCTGAATTACCAGAGGAATACAGGGACTTCTATGCACGCCAAATGGTCTTAC
 GTATTCAAGACAAAGCCTACAGCAAGAAGTTTGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG216329 representing NM_001037742
 Red=Cloning site Green=Tags(s)

MAEQHLVPVRLRGVSREQFMEHLYPQRKPLVLEGLDLGSCTSKWTVDYLSQVGGTKEVKIHVAVPQMDF
 ISKNFVYRTLFPNKLVRAAEETHKEFFISEDEKYYLRSLGEDPRKDVADIRQQFPSLGGDITFPMFFRE
 EQFFSSVFRISSPGLQLWTHYDVMDFLIQVTGKKRITLFNPRDAQYL YLSGSKSEVLNIDSPDLDKYPL
 FPKARRYECSEAGDVLFI PALWFHNVVSEEFVG VNI FWKHLPSECYDTTDTYGNKDPVAASRAVQILD
 RALKTLAELPEEYRDFYARQMVLRIQDKAYSKNFE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001037742

ORF Size: 945 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001037742.2](#), [NP_001032831.2](#)

RefSeq Size: 1448 bp

RefSeq ORF: 948 bp

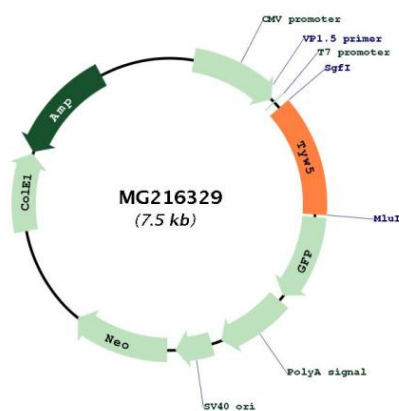
Locus ID: 68736

UniProt ID: [A2RSX7](#)

Cytogenetics: 1 C1.3

Gene Summary: tRNA hydroxylase that acts as a component of the wybutosine biosynthesis pathway. Wybutosine is a hyper modified guanosine with a tricyclic base found at the 3'-position adjacent to the anticodon of eukaryotic phenylalanine tRNA. Catalyzes the hydroxylation of 7-(a-amino-a-carboxypropyl)wyosine (yW-72) into undermodified hydroxywybutosine (OHyW*). OHyW* being further transformed into hydroxywybutosine (OHyW) by LCMT2/TYW4. OHyW is a derivative of wybutosine found in higher eukaryotes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216329