

Product datasheet for **MR228295**

Tyw5 (NM_001302963) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tyw5 (NM_001302963) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Tyw5
Synonyms: 1110034B05Rik
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR228295 representing NM_001302963
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCTTCAGAGAGGAGCAGTCTTTCCAGTGTTCGAATTAGTTCACCTGGATTACAGCTCTGGA
CTCACTATGATGTAATGGATAACTTTTTAATAACAAGTGACAGGAAAGAAGCGAATTACACTGTTCAATCC
TCGGGATGCACAATTTTATATTATCAGTGCTGAATATCGACAGCCAGACCTGGATAAATACCCACTC
TTTCCTAAAGCAAGGAGGTATGAGTGCTCCCTGGAAGCTGGAGATGTCTCTTCATTCTGCTTTATGGT
TCCATAATGTAGTTTCTGAAGAGTTGGAGTGGGGTGAATATCTTCTGGAAGCACCTTCCATCGGAATG
CTATGACACAACAGATACCTATGGCAACAAAGATCCTGTAGCGGCATCCAGAGCTGTGCAGATCTTGGAC
AGAGCTTTGAAAACACTGGCTGAATTACCAGAGGAATACAGGGACTTCTATGCACGCCAAATGGTCTTAC
GTATCAAGACAAAGCCTACAGCAAGAAGCTTTGAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228295 representing NM_001302963
Red=Cloning site Green=Tags(s)

MFFREEQFFSSVFRISSPGLQLWTHYDVMDFLIQVTGKKRITLFNPRDAQLYLSVLNIDSPDLDKYPL
FPKARRYECSLEAGDVLFIIPALWFHNVVSEEFVGVNIFWKHLPSECYDITDTYGNKDPVAASRAVQILD
RALKTLAELPEEYRDFYARQMVLRIDKAYSKNFE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

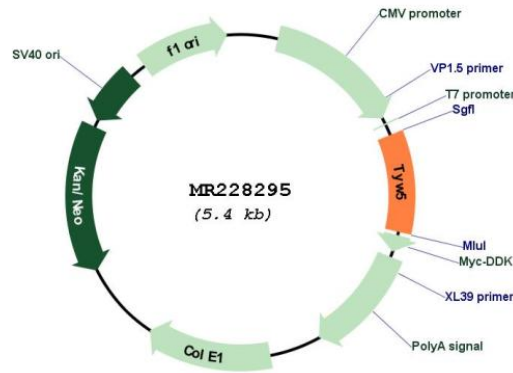
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_001302963

ORF Size: 525 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:	<u>NM_001302963.1</u> , <u>NP_001289892.1</u>
RefSeq Size:	1399 bp
RefSeq ORF:	528 bp
Locus ID:	68736
Cytogenetics:	1 C1.3
MW:	21 kDa
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]