

Product datasheet for **MG226447**

Usp33 (NM_001076676) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp33 (NM_001076676) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usp33
Synonyms:	9830169D19Rik; AA409780; Vdu1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226447 representing NM_001076676
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACGACTTTTCGAAATCATTGTCACATTTGGATTGAGTTGGTGAATAACGAAAGAGGACTTGATAC
 AGAAATCTCTCGGCGCTTGTGAGGACTGTAAAGTCAGAGGACCAACCTGTGGCGTGCCTGGAGAATAG
 GTGCTCCTATGTTGGCTGCGGGGAGTCGCAAGTGACCACAGCACCATACACTCGCAGGAGACAAAGCAT
 TATCTAACTGTGAACCTCACCCTCTTCGAGTATGGTGTATGCTTGCAGCAAAGAAGTATTTTTGGATA
 GAAATTAGGAACTCCTCCTTACCTCATGTAAGACAGCCTCAACAAACACAAGAAAACAGTGTCCA
 GGATTTTAAAATCCCAGTAATCCAGCATTGAAAACCCCATGGTTGCTGTGTCTGAAGACTGGATATA
 GAAGTGGAAAGAGACGAGCTGAAGGCTAGAGGCTGACAGGTTTAAAAACATTGGAATACTTGTT
 ATATGAACGCGGCTGCAGGCTCTTTCTAACTGCCACCTTTGACACAGTCTTTCTTGATTGTGGAGG
 ACTGGCTAGAACAGATAAGAAACCAGCAATTTGTAAAAGTTATCTCAAATAATGACCGAGTTGTGGCAC
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 GAGGTTATTCTCAGCAGGATGCCAGGAATTCCTTCGCTGTCTAATGGACCTGCTTCATGAGGAGCTGAA
 GGAGCAGGTATGGAAATGGAGGAAGAGCCTCAACACTAACTTCTGAGGAGACGGTGGAGGAAGAGAAG
 AGCCAGTCAGATGTGGATTTTCAGTCGTGCGAGTCTTGTAGCAGCAGCGAAGAGCAGAAAATGAGAGTG
 GCTCCAAGGCTTTCCTGAGGACAGCAATGAGACCACCATGCTCATCCAGGACGAGGATGACCTGGAGAT
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 TTTTGTAAAGTACAGAAGTTTCTGAGATTTTGTGTATCCACCTTAAAGATTTTCGACATGAAGTATGT
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 GTGATGCTCAAGCAAGGAGCAGACTCTGGTCAAATTTTCAGAAGAAACATGGAATTTCTGCAGTCTATAT
 ATGGTGGGGGCTGAAGTTATCCTCCGACCTCCAGTTGTTTCATGTTGACCCTGATGTACTCCAAGCAGA
 GAAAAGATTGAAGTAGAACTCGCTCTTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226447 representing NM_001076676
 Red=Cloning site Green=Tags(s)

MTTFRNHCPHLDSVGEITKEDLIQKSLGACQDCKVRGPNLWACLENRCSYVGCGESQVDHSTIHSQETKH
 YLTVNL TTLRVWCYACSKVEFLDRKLGTPPSLPHVRQPQTQENSVDKIPSNPALKTPMVAVSEDLDI
 EVEEDELKARGLTGLKNI GNTCYMNAALQALSNCPLTQFFLDCGGLARTDKKPAICKSYLKLMTLWH
 KSRPGSVVPANLFGGIKTVNPTFRGYSQQDAQEFLRCLMDLLHEELKEQVMEMEEEEPTLTSEETVEEEK
 SQSDVDFQSCESCSSSEKAENESGSKGFPEDSNETTMLIQDEDDLEMAKDWQKEKVCNKINKANADVLD
 KDRDTCVETVDLNSQETVKVQIHRASEITDVHLNDLATSQILPSNESVSPRLSASPPKLGSLWPLSP
 PHKKAQSTSARKKQHKKYRSVISDIFDGTVISSVQCLTCDRVSITLETQDL SLPPIPKEDLAKLHSS
 HPTIVKAGSCGEAYAPQGWIAFFMEYVKSFWGPPVTLQDCLAFFARDELKGDNMYSCCKKLRNGVK
 FCKVQKFP EILCIHLKFRHELMFSTKISTHVSFPLEGLDLQPFLAKDSPAQIVTYDLLSVICHHTASS
 GHYIAYCRNNLNLWYEFDDQSVTEVSESTVQNAEAYVLFYRKSSEEAQKERRRISNLLNIMEPSLLQFY
 ISRQWLNKFKTFAEPGPI SNDFLCIHGGIPPRKASYIEDLVMLPQNIWNLYSRYGGGPAVNHLIYICH
 TCQIELEKIEKRKTELEIFIRLNRAFQEEDSPATFYCISMQWFREWESFVKDPPGPIDNTKIAVTKCGS
 VMLKQGADSGQISEETWNFLQSIYGGGPEVILRPPVVHVDPDVLQAEKIEVETRSL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

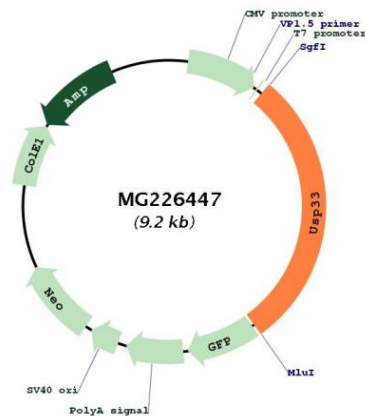
Cloning Scheme:



ACCN:	NM_001076676
ORF Size:	2691 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_001076676.2 , NP_001070144.1
RefSeq Size:	4164 bp
RefSeq ORF:	2694 bp
Locus ID:	170822
Cytogenetics:	3 H3

Gene Summary:

Deubiquitinating enzyme involved in various processes such as centrosome duplication, cellular migration and beta-2 adrenergic receptor/ADRB2 recycling. Involved in regulation of centrosome duplication by mediating deubiquitination of CCP110 in S and G2/M phase, leading to stabilize CCP110 during the period which centrioles duplicate and elongate. Involved in cell migration via its interaction with intracellular domain of ROBO1, leading to regulate the Slit signaling. Plays a role in commissural axon guidance cross the ventral midline of the neural tube in a Slit-dependent manner, possibly by mediating the deubiquitination of ROBO1. Acts as a regulator of G-protein coupled receptor (GPCR) signaling by mediating the deubiquitination of beta-arrestins (ARRB1 and ARRB2) and beta-2 adrenergic receptor (ADRB2). Plays a central role in ADRB2 recycling and resensitization after prolonged agonist stimulation by constitutively binding ADRB2, mediating deubiquitination of ADRB2 and inhibiting lysosomal trafficking of ADRB2. Upon dissociation, it is probably transferred to the translocated beta-arrestins, leading to beta-arrestins deubiquitination and disengagement from ADRB2. This suggests the existence of a dynamic exchange between the ADRB2 and beta-arrestins. Deubiquitinates DIO2, thereby regulating thyroid hormone regulation. Mediates deubiquitination of both 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains. [UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MG226447