

Product datasheet for **MC229142**

Usp33 (NM_001252486) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp33 (NM_001252486) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Usp33
Synonyms:	9830169D19Rik; AA409780; Vdu1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC229142 representing NM_001252486
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACGACTTTTCGAAATCATTGTCACATTTGGATTGAGTTGGTAAATACGAAAGAGGACTTGATAC
 AGAAATCTCTCGGCGCTTGTGAGGACTGTAAAGTCAGAGGACCAACCTGTGGCGTGCCTGGAGAATAG
 GTGCTCTATGTTGGCTGCGGGGAGTCGCAAGTGACCACAGCACCATACACTCGCAGGAGACAAAGCAT
 TATCTAACTGTGAACCTCACCCTCTTCGAGTATGGTGTATGCTTGCAGCAAAGAAGTATTTTTGGATA
 GAAATTAGGAACTCCTCCTTACCTCATGTAAGACAGCCTCAACAAACACAAGAAAACAGTGTCCA
 GGATTTTAAAATCCCAGTAATCCAGCATTGAAAACCCCATGGTTGCTGTGTCTGAAGACTGGATATA
 GAAGTGGAGGAGACGAGCTGAAGGCTAGAGGCTGACAGGTTTAAAAACATTGAAATACTTGTT
 ATATGAACGCGGCTGCAGGCTCTTTCTAACTGCCACCTTTGACACAGTCTTTCTTGATTGTGGAGG
 ACTGGCTAGAACAGATAAGAAACCAGCAATTTGTAAAAGTTATCTCAAATAATGACCGAGTTGTGGCAC
 AAGAGCAGGCCAGGATCTGTTGTCCGGCTAATCTGTTCCAAGGAATTAAGTGTAAATCCAACCTTTTC
 GAGGTTATTCTCAGCAGGATGCCAGGAATTCCTTCGCTGTCTAATGGACCTGCTTCATGAGGAGCTGAA
 GGAGCAGGTATGGAAATGGAGGAAGAGCCTCAACACTAACTTCTGAGGAGACGGTGGAGGAAGAGAAG
 AGCCAGTCAGATGTGGATTTTTCAGTCGTGCGAGTCTTGTAGCAGCAGCGAAGAGCAGAAAATGAGAGTG
 GCTCCAAGGCTTTCTGAGGACAGCAATGAGACCACCATGCTCATCCAGGACGAGGATGACCTGGAGAT
 GGCCAAAGACTGGCAGAAAGAGAAGGTGTGCAATAAGTCAACAAGGCAATGCCGATGTAGAATGGAC
 AAAGACAGGGACACAGTGTGTAAACAGTTGACCTAAACAGCCAGGAGACCGTCAAAGTGCAGATACACG
 GCAGAGCCTCAGAATCTATCACTGATGTCATCTGAATGACCTAGCTACGTCACAGATCCTTCCTCAAA
 TGAAAGTGTAGTCCACGGTTATCAGCAAGCCCTCCTAAGCTAGGCACTGTGGCCAGGACTGTGCGCT
 CCACACAAGAAAGCTCAGTCTACATCTGCAAGAGGAAAAAGCAGCATAAGAAATACAGAAGTGTATCT
 CCGACATATTCGATGGAACAGTCATTAGCTCGGTACAGTGTCTGACGTGCGATAGGGTGTCTATAACCT
 CGAGACCTTTCCAGGATCTGCTCTGCCGATTCCTGGCAAGGAGGACCTGGCTAAGCTGCACTCCTCCAGT
 CACCCAACTATAGTCAAAGCAGGGTATGTTGGTGAAGCGTACGCCCGCAGGGTGGATAGCTTTCTTCA
 TGGAGTATGTGAAGAGCTGGTTTTGGGGTCCAGTAGTTACCTTGAAGATTGTCTTGCTGCCTTCTTCGC
 CAGAGATGAACCTAAAGGTGACAACATGTACAGTTGTAAAAATGCAAAAAGTTGAGGAATGGAGTAAAG
 TTTTGTAAAGTACAGAAGTTTCTGAGATTTTGTGTATCCACCTAAAAGATTTTCGACATGAACCTGATGT
 TTTCCACCAAAATTAGCACCCATGTTTCTTCCCCTGGAAGGCCCTCGATCTTCAGCCATTTCTTGCAAA
 GGACAGCCAGCTCAGATTGTGACATATGATCTCCTGTACAGTCTGTCAACATGGGACTGCAAGTAGT
 GGGCACTACATTGCCTACTGCCGAAACAATTTAAATAACCTGTGGTATGAGTTTGTGACAGAGCGTCA
 CTGAAGTTTCAGAGTCCACTGTACAGAATGCCGAGGCTACGTCCTTTTCTACAGGAAGAGCAGTGAAGA
 GGCACAAAAGGAGAGGCGGAGGATATCAAAATTTGTTGAACATCATGGAACCTAGCCTCCTCAGTTCTAC
 ATATCTCGACAGTGGTTGAATAAATTTAAGACCTTTGCTGAACCTGGCCCTATTTCAAATAATGATTTTC
 TCTGTATCCATGGAGTATTCTCCACGAAAAGCGAGTTATATTGAAGACTTAGTTTTGATGCTGCCTCA
 GAACATTTGGGATAACCTCTATAGCAGGTATGGAGGAGGCTGCTGTCAACATCTACATCTGCCAC
 ACCTGCCAAATGAGTTAGAGAAGATTGAAAAACGAAGAAAAACCGAATTTGGAAATTTTTATTTCGGCTCA
 ACAGAGCATTTCAAGAGGAGACTCCCCAGCTACTTTTTACTGTATCAGCATGCAGTGGTTAGAGAATG
 GGAGAGTTTTGTAAAGGTAAGGATGGAGATCCCCAGGTCGAATCGACAACACTAAAATTCGCGTTACT
 AAATGTGGCAGTGTGATGCTCAAGCAAGGAGCAGACTCTGGTCAAATTTCAGAAGAAACATGGAATTTCC
 TGCAGTCTATATGGTGGGGGCTGAAGTTATCCTCCGACCTCCAGTTGTTTCATGTTGACCCTGATGT
 ACTCCAAGCAGAGGAAAAGATTGAAGTAGAAACTCGCTCTTTG**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_001252486

Insert Size:	2706 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001252486.1</u> , <u>NP_001239415.1</u>
RefSeq Size:	4185 bp
RefSeq ORF:	2706 bp
Locus ID:	170822
UniProt ID:	<u>Q8R5K2</u>
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]

Transcript Variant: This variant (3) uses an alternate in-frame splice junction compared to variant 1, resulting in a shorter protein (isoform 3).