

Product datasheet for **MR211168**

Usp20 (NM_028846) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp20 (NM_028846) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Usp20
Synonyms:	1700055M05Rik; AI467231; Vdu2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR211168 representing NM_028846
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGGACGCCAGAGACCTCTGCCCTCACCTGGACTGCATAGGGGAGGTGACCAAAGAGGATTTGCTGC
 TTAATCTAAGGGAACCTGCCAGTCATGTGGGGTTGCTGGACCTAACCTATGGGCTTGCCTCCAGGTCAC
 CTGCCCTTACGTTGGCTGTGGAGAGTCTTTTGGCTGACCATAGCAGCATTTCATGCCAGGTGAAAAAGCAC
 AACCTGACTGTGAACCTGACCACGTTCCGGGTCTGGTGTACGCCTGTGAGCGTGAAGTCTTTCTGGAGC
 AGCGTCTGGCAGTCCACCTGGCCAGCTCCTCAGCCAGGCTCTCAGAGCAGGACTCCCCACCCTCCCA
 CCCGCTGAAAGCTGTCCCTATTGCTGTGGCTGATGAAGGAGAGTCTGAGTCTGAGGATGACGACCTGAAG
 CCTCGAGGCCCTCACAGGCATGAAGAACCTGGGAACTCCTGTTACATGAATGCTGCCCTGCAGGCCCTTGT
 CCAATTGCCCCCGCTCACCCAGTCTTCTCTGGAGTGTGGTGGTCTGGTGCACACAGACAAGAAGCCAGC
 CTTGTGCAAAAGTTACCAGAAGTTGATCTCTGAGGTGTGGCACAAGAAGCGGCCAAGCTATGTGGTCCCC
 ACCAGCCTGTCCCATGGGATCAAGTTGGTCAACCCGATGTTCCGAGGCTATGCCAGCAGGACACCCAGG
 AGTTCCTACGCTGCCTAATGGACCAGCTTCATGAGGAGCTCAAGGAGCCCATGGTCGCTGCTGTGGCAGC
 ACTCACCGATGCTCGGGACTCCGATTCCAGTGACACAGATGAGAGGCGTGATGGCGACCGGAGCCCATCA
 GAGGACGAGTTTCTGTCTGTGACTCGAGCAGTGACAGGGGTGAGGGTGATGGGCAGGGGCGTGGTGGAG
 GCAGCTCAAAGGCCGAGATGGAGCTGCTGATCTCAGATGAGGCGGGCCGAGCCATCTCTGAGAAGGAGCG
 GATGAAGGACCGCAAGTTCTCTGGGGCCAGCAGCGCACCAACTCAGAGCAAGTGGATGAGGATGCAGAT
 GTGGACACGGCCATGGCGTCCCTTGATGAGCAATCCAGAGAGGCCAGCCACCATCACCAAGTCCACCA
 GCCCTGCCAGACCCAGAACCCAGACAACGAAGCCACATACGCAGCTCCTCTCGTCCCTGCAGCCCTGT
 TCAACCACCACGAGGGCCATTCCAAGCTGTCCAGCAGCCCTCCTCGTGCAAGCCCTGTGAGGATGGGG
 CCGTCGTATGTGCTCAAGAAAGCCAGGTGCCAAGCACTGGTGGTCCGAGGCGGAAGGAGCAGAGCTACC
 GCAGTGTCTCAGACGCTTCAATGGCTCTGTCTCAGCCTGGTGCAGTGTCTTACCTGTGACCGGGT
 GTCTACCACAGTGGAGACATTCCAGGACCTGCTATTGCCCATCCCTGGCAAGGAAGATCTAGCCAAACTC
 CACTCTGCCATCTACCAGAATGTACCAGCAAGCCGGGTGCCTGTGGGGACAGCTATTCTCCAGGGCT
 GGCTGGCCTTCATCGTGGAGTACATCAGACGTTTGTGGTATCCTGTACCCCGAGCTGGTTTTGGGGACC
 TGTTGTCACTAGAAGACTGCCTTGTGCTTTCTTTGCTGCTGATGAGCTGAAGGGTGACAACATGTAC
 AGCTGTGAGCGGTGAAGAAGCTTCGGAATGGCGTGAAGTACTGTAAGTCTATGTCTGCCTGAGATTC
 TGTGCGTCCACCTGAAGCGCTTCCGGCATGAGGTGATGACTCCTTCAAGGTGAGCAGCCATGTCTCTTT
 CCCCCTCGAGGGACTGGACCTACGCCCTTTTCTGGCCAAGGAGTGACAGTCCCAGGTACCACCTATGAC
 CTCTCTCTGTCTGTCAACATGGCACAGCAGGCGAGTGGGCACTACATTGCCTACTGTGAGAAGCTGA
 TCAATGGGCAGTGGTACGAATTCGATGACCAGTACGTCACCGAGGTCCATGAGACGGTAGTACAGAAGCT
 GGAGGCCCTACGTGCTGTTCTACAGGAAGAGCAGTGAAGGAGCCATGCGTGAGCGGCAGCAGGTAGTGTCC
 CTGGCTGCCATGCGGGAACCCAGCCTGCTCCGCTTCTACGTGTCCCGAGAATGGCTCAACAAATTCACCA
 CCTTTGCCGAGCCAGGGCCATCACCAACCACACCTTCTGTGCTCCCATGGAGGTATCCACCCAAACAA
 ATACCACTACATCGATGACCTGGTGGTCACTCCTGCCGAGAGCGTCTGGGAGCACCTGTACAGCAGGTTT
 GGGGGCGGCCCTGCTGTGAACCATCTGTATGTGTGCTCCATCTGCCAGGTGGAGATTGAGGCCCTGGCCA
 AGCGCAGGAGGGTGGAGATTGACACTTTCATCAAGCTGAACAAGGCATTCCAAGCTGAGGAGTCTCCCGC
 GGTCTACTGTATCAGCATGCACTGGTTCAGAGAGTGGGAGGCCTTCGTCAAGGGGAAGGACAGTGAAG
 CCTCCCGGCCCATCGACAACAGCAGGATTGCCAGGTCAAAGGCAGTGGCCATATCCAGCTAAAGCAGG
 GGGCTGACTGTGGCCAGATTTCCGAGGAGACCTGGACCTATCTGAGCAGTCTGTATGGGGGCGGCCCTGA
 GATTGCCATCCGGCAGAGTGTGGCCAGCTCCCAGACCCAGAAAGCTTGACGGAGAGCAGAAGATTGAG
 GCTGAGACCCGGCTCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR211168 representing NM_028846
 Red=Cloning site Green=Tags(s)

MGDARDLCPHLDCIGEVTKEDLLLKSKGTCQSCGVAGPNLWACLQVTCYPYVGCGESFADHSSIIHAQVKKH
 NLTVNL TFRVWCYACEREVFLQRLAVHLASSARLSEQDSPPSHPLKAVPIA VADEGESESEDDDLK
 PRGLTG MKNLGNSCYMNAALQALSNCPPLTQFFLECGGLVRTDKK PALCKSYQKLI SEVWHKKRPSYVVP
 TSLSHG IKL VNP MFRGYAQQDTQEF LRLCLMDQLHEELKEPMVA AVAL TDARDSDS SDTDERRDGD RSPS
 EDEF LSCDSSDRGEGDQGRGGSSKAEMELLI SDEAGRAI SEKERMKDRKFSWGQQRTNSEQVDEDAD
 VDTAMASLDEQ SREAQPPSPRSTSPCQTP EPDNEAHIRSSSRPCSPVHHHHHGHGSKLSSSPPRASVVRMG
 PSYV LKKAQVPSTGRRRKEQSYRSVISDVFN GSVLSLVQCL TCDRVSTTVETFDLSLPI PKEDLAKL
 HSAIYQ NVPAKPGACGDSYSSQWLA FIVEYIRRFVVSCTPSWFWGPVVTLEDCLAFFAADELKGDNMY
 SCERCKLRNGVKYCKVLC LPEILCVHLKRF RHEVMYSFKVSSHVSFPLEGLDLRPF LAKECTSQVTTYD
 LLSVIC HGTAGSGHYIAYCQNVINGQWYEFDDQYVTEVHETVVQNV EAYVLFYRKSSEEAMRERQQVVS
 LAAMREPSLLRFYVSREWLNKFN TFAEPGPI TNHTF LCSHG GIPP NKYHYIDDLVVILPQSVWEHLYSRF
 GGGPAVNHLVYCSICQVEIEALAKRRRVEIDTFIKLNKAFQAEESP AVIYCI SMHWFREWEAFVKGK DSE
 PPGPIDNSRIAQVKGSGHIQLKQ GADCGQI SEETW TYLSSLYGGGPEIAIRQSVAQLPDPE SLHG EKIE
 AETRAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9037_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



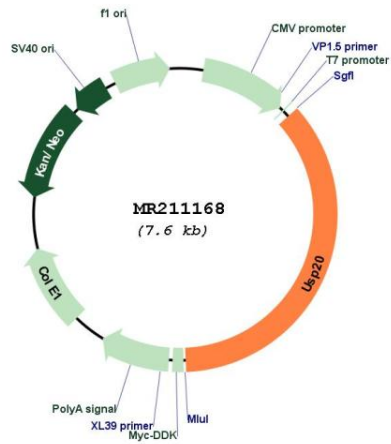
* The last codon before the Stop codon of the ORF

ACCN: NM_028846

ORF Size: 2748 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_028846.5 , NP_083122.1
RefSeq Size:	4157 bp
RefSeq ORF:	2751 bp
Locus ID:	74270
UniProt ID:	Q8C6M1
Cytogenetics:	2 B
MW:	102.6 kDa
Gene Summary:	Deubiquitinating enzyme involved in beta-2 adrenergic receptor (ADRB2) recycling. Acts as a regulator of G-protein coupled receptor (GPCR) signaling by mediating the deubiquitination 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, possibly 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. Deubiquitinates HIF1A, leading to stabilize HIF1A and enhance HIF1A-mediated activity. Mediates deubiquitination of both 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211168