

## Product datasheet for MR204258

### Stub1 (NM\_019719) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Stub1 (NM_019719) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stub1
Synonyms:	0610033N24Rik; 2210017D18Rik; 2310040B03Rik; AW046544; Chip
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204258 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGGCAAGGAGGAAAAGGAGGGCGCGCGGCTGGGCACTGGTGGCGGGCAGCCCTGATAAGA  
GCCCGAGTGCACAAGAGCTCAAGGAGCAGGAAACCGGCTCTTCGTGGCCGCAAGTACCCGAGGGCGG  
GGCCTGTACGGCCGCGCCATCACTCGGAACCCACTTGTGGCAGTGTACTACCTAACCGGGCCCTGTGC  
TATCTGAAGATGCAGCAGCCTGAACAGGCACTTGTGACTGCCGGCAGCCCTGGAGCTGGACGGGCAGT  
CTGTGAAGGCGCACTTCTCCTGGGGCAGTGCCAGCTGGAGATGGAGAGTTATGATGAGGCCATTGCCAA  
TCTGCAGCGAGCCTATAGTTGGCCAAGGAGCAGCGACTCAACTTGGGGATGATATTCCTAGTGCCCTT  
CGCATTGCTAAGAAGAAGCGCTGGAACAGTATCGAGGAACGGCGCATCCACCAGGAGAGTGAGCTGCATT  
CATATCTCACCAGGCTCATTGCTGCTGAGCGAGAGAGGGAAGTGGAGGAGTGTGACGGAAACACGAGGG  
TCATGAAGATGATGGCCACATCCGGGCCAGCAGGCTGCATTGAGGCCAAGCAGATAAATACATGGCA  
GATATGGATGAGCTTTCTCTCAGGTGGACGAGAAAAGAAAGCAGATATCCCTGACTACTTGTGTG  
GCAAGATTAGCTTTGAGCTGATGCGGGAACCCTGCATTACCCAGTGGTATCACCTATGACCCGAAAGCA  
CATTGAGGAGCACCTGCAGCGTGTGGGCCACTTTGACCCTGTGACCCGGAGCCCTCTGACCCAGGAACAG  
CTCATCCCAACTTGCCATGAAGGAAGTCATTGACGCTTTCATCTCTGAGAACGGCTGGGTAGAGGACT  
AT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204258 protein sequence  
Red=Cloning site Green=Tags(s)

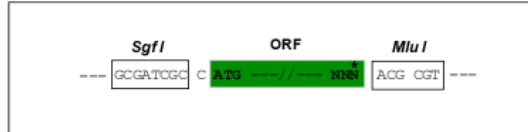
MKGKKEKEGGARLGTGGGGSPDKSPSAQELKEQGNRLFVGRKYPEAAACYGRAITRNPLVAVYYTNRALC  
 YLKMQQPEQALADCRRALELDGQSVKAHFFLGQCQLEMESYDEAIANLQRAYSLAKEQRLNFGDDIPSAL  
 RIAKKKRWNSIEERRIHQESLHSHYLTRLIAAERERELEEQRNHEGHEDDGHIRAQQACIEAKHDKYMA  
 DMDELF SQVDEKRKKRDIPDYLCGKISFELMREPCITPSGITYDRKDIEEHLQRVGHFDPVTRSPLTQE  
 LIPNLAMKEVIDAFISENGWVEDY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_019719

**ORF Size:** 915 bp

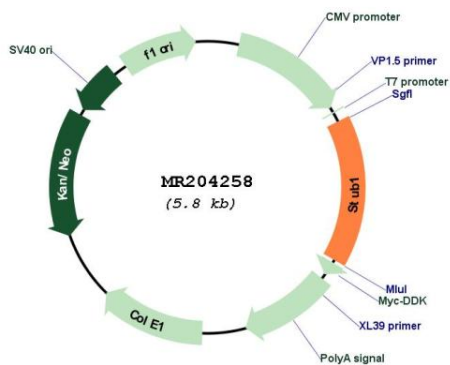
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_019719.4</a>
<b>RefSeq Size:</b>	1672 bp
<b>RefSeq ORF:</b>	915 bp
<b>Locus ID:</b>	56424
<b>UniProt ID:</b>	<a href="#">Q9WUD1</a>
<b>Cytogenetics:</b>	17 12.93 cM
<b>MW:</b>	34.9 kDa
<b>Gene Summary:</b>	<p>E3 ubiquitin-protein ligase which targets misfolded chaperone substrates towards proteasomal degradation. Collaborates with ATXN3 in the degradation of misfolded chaperone substrates: ATXN3 restricting the length of ubiquitin chain attached to STUB1/CHIP substrates and preventing further chain extension. Ubiquitinates NOS1 in concert with Hsp70 and Hsp40. Modulates the activity of several chaperone complexes, including Hsp70, Hsc70 and Hsp90. Mediates transfer of non-canonical short ubiquitin chains to HSPA8 that have no effect on HSPA8 degradation. Mediates polyubiquitination of DNA polymerase beta (POLB) at 'Lys-41', 'Lys-61' and 'Lys-81', thereby playing a role in base-excision repair: catalyzes polyubiquitination by amplifying the HUWE1/ARF-BP1-dependent monoubiquitination and leading to POLB-degradation by the proteasome. Mediates polyubiquitination of CYP3A4. Ubiquitinates EPHA2 and may regulate the receptor stability and activity through proteasomal degradation. Negatively regulates the suppressive function of regulatory T-cells (Treg) during inflammation by mediating the ubiquitination and degradation of FOXP3 in a HSPA1A/B-dependent manner (PubMed:23973223). Acts as a co-chaperone for HSPA1A and HSPA1B chaperone proteins and promotes ubiquitin-mediated protein degradation. Likely mediates polyubiquitination and downregulates plasma membrane expression of PD-L1/CD274, an immune inhibitory ligand critical for immune tolerance to self and antitumor immunity. Negatively regulates TGF-beta signaling by modulating the basal level of SMAD3 via ubiquitin-mediated degradation (By similarity). May regulate myosin assembly in striated muscles together with UBE4B and VCP/p97 by targeting myosin chaperone UNC45B for proteasomal degradation (By similarity). Mediates ubiquitination of RIPK3 leading to its subsequent proteasome-dependent degradation (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR204258