

Product datasheet for **MC224480**

Mug2 (NM_008646) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mug2 (NM_008646) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mug2
Synonyms:	Cpamd8
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224480 representing NM_008646 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTGGAAGAGCAGACGGGCTCAGCTGTGTCTTTTTTCAGTTCTTCTGCCTTCTGCCTTCTGCTTCTT
CACTCAATGGAGACTCGAAGTATATGGTCTGGTCCCTTCTCAGCTCTACACTGAGACCCCTGAGAAAAT
CTGCCTCCATTTATACCATCTGAATGAGACAGTGACCGTTACAGCTTCCCTGGTATCTCAAACGGGAAGG
AGAAACCTGTTTCGATGAGCTTGTGGTTGACAAGGACTTGTCCAATGTGTTTCTTCATTATCCCTACAC
TCAACTCTCCTGATGAGGAGGATTTCTCTACGTGGACATCAAAGGGCCAACCCACGAATTCAGCAAAAAG
GAATGCAGTGCTTGTGAAGAACAAGAAAGTGTGTCTTTGTCCAGACAGATAAGCCCGTGTACAAGCCA
GGACAATCAGTTAAATTCGGGTTGTCTCTATGGATAAACTCTACGCCCCCTGAATGAGTTGCTTCCCTC
TGGCTTACATTGAGGATCCGAAAAAGAACCGAATTATGCAGTGGAGGGATTAAGACTGAGAATGGGCT
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TCAGGGGTGAAGGAAGAACAACCTCTTACTGTGATGGAATTTGTGCTTCCAGATTTAATGTCGACCTGA
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CATGGGATTCCATTTTGTGAAAGTCCGCCTAGTGGATATCAAGGGAGACCCATCCCAAATGAGAGAG
TCTTCATCAAAGCACAAGTACTTGGCTATACCAGTGCTACTACCACTGATCAGCATGGCCTGGCAAAGTT
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TCAGGCACATTTTATTCTGAAGGGGGACTTAGGAGTGCTGAAAGAGCTCGTTTTCTACTACCTGGTCATG
GCCAGGGAAGCATCATCCAGACTGAAACCATACTACCAGGTGGAGCCAGGAGAAGCTCCAGTAAAAG



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GCAACTTTGACTTGGAGATTCTGTGGAGTTCAGCATGGCCCCATGGCTAAAATGCTCATCTACCCAT
 CTTGCCTGATGGAGAAGTGATTGCGAGTTCTGTAACTTTGAAATTGAAAAGTGTCTTCGCAACAAAGTG
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 TTCTGGATATACAATCTGCCAGGTATGCAGCACAAACAATTATTCCAAGTTCAGTCTGTCTGAAGAC
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 GGAATCAAGCAAGAGCATACCTCAACTCACTGTTCTGTGCATCAGATGCTGAGATATCTGAAAAATGT
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 GAGTTCAGCCATAAAAAACACACAAAACCTTCCCATATGCCCTATGGCTGTGGGGAGCAGAACATGGTC
 CTTTTGTCTCCCAACATCTACGTATTGAAATATCTGGATAAAACCAACAGCTGACTCAGAAGATCAAGA
 CTAAGGCCCTCGGCTTCCCTAGAGCTGGTATCAGAGAGAGCTGAACTACAAACACAAGGATGGCTCCTA
 CAGTGCCCTCGGGATCAAAATGGCGAGAGAGGGAAACACTTGGCTCACAGCCTTTGTGCTCAAGTCT
 TTTGCCCAAGCTCGAGCCTTCACTTTCATCGATGAATCACACATACCCATGCCTTCACTGGCTCTCCC
 AGCAGCAGAAGGACAATGGCTGCTTCCGGAGCTCCGGATCATTGTTCCACAATGACATAAAGCATCTGT
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 TGAAGTCACTTGATGAGGAAGCTATAAAAGAAGACAACCTCCACTGGGAAAGACCTCAGAAACCCAG
 GAAATCCGAACACAATTTGTACAAACCCAGGCTTCTCTGTTGAAGTAGAGATGAATGCCTATGTGGTC
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 GGCTCACAAAGCAACAGAATCCAATGGTGGCTTCTCCTCCACACAGGACACTGTGGTGGCCCTTGATGC
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 GGGTCATTTTCCAAAAGTTCCAAGTGGAGAACAGTAATTGCCTGTTACTTCAGCAGTCCCATTACCAG
 ACATTCCTGGGGACTATACCATCAGTGTATCAGGGGAAGGATGTGTGTATGCTCAGACTACACTGAGATA
 CAACATGCACTTGAGAAAGCAGCAGTCTGCATTTGCTCTACGGGTACAGACAGTACCTCTAACTTGAAT
 AACCCCAAAGGCCACAACAGCTTCCAGATCTACTAGAAATCAGTTACACAGGCAGCCGGCCAGCCTCCA
 ACATGGTGATTGCTGATGTGAAGATGCTATCTGGTTTCATCCCATTGAAACCAACAGTAAAAAGCTTGA
 AAGATTAGAGCACATAAGCAGAACAGAAGTGAAGCAACAACAATGTCTTATTATTTGGATCAGGTGACC
 AATCAGACACTGGCCTTCTCCTTCACTTCAACAAGACATCTCAGTACGGAACCTGCAGCCTGCCATTG
 TGAAAGTCTATGACTACTATGAGACAGATGAAGTGGCTTATGCTGAATACAGCAGTCCCTGCAGCTCAGA
 CAAACAAAATGTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_008646
Insert Size: 4356 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).
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_008646.3</u> , <u>NP_032672.2</u>
RefSeq Size:	4544 bp
RefSeq ORF:	4356 bp
Locus ID:	17837
UniProt ID:	<u>P28666</u>
Cytogenetics:	6 F1
Gene Summary:	A proteinase activates the inhibitor by specific proteolysis in the bait region, which, by an unknown mechanism leads to reaction at the cysteinyl-glutamyl internal thiol ester site and to a conformational change, whereby the proteinase is trapped and/or covalently bound to the inhibitor. While in the tetrameric proteinase inhibitors steric inhibition is sufficiently strong, monomeric forms need a covalent linkage between the activated glutamyl residue of the original thiol ester and a terminal amino group of a lysine or another nucleophilic group on the proteinase, for inhibition to be effective.[UniProtKB/Swiss-Prot Function]