

Product datasheet for **MC222270**

Mastl (NM_025979) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mastl (NM_025979) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mastl
Synonyms:	2700091H24Rik; C88295; GW; GWL; MAST-L; THC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222270 representing NM_025979
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**

ATGGAGTCCGCCTCGGCAAGTGAGGAGAATGAAGGAGGTGCGGCGATAGAGGAGTGCCTGAGTAGGATCC
 CGGTACCAAGACCACCCTCCATTGAGGAGTTCACCATAGTGAAGCCCATTAGCCGTGGTGCATTCCGGAA
 AGTGTAACCTGGGACAGAAAGCGGCAAGTTGTACGCAGTGAAGGTTGTCAAAAAGGCAGACATGATCAAT
 AAAAATATGACTCATCAGGTACAAGCTGAGAGAGATGCCCTGGCACTGAGCAAAAAGCCCTTTTGTGTGC
 ATCTCTATTACTCACTGCAGTCAGCAAGCAACATCTACTTGATAATGGAGTATCTTATTGGTGGAGATGT
 CAAGTCTCTCCTACATATATATGGTTATTTTGTGAAGAGATGGCTATAAAATATATTTCTGAAGTAGCA
 TTGGCTTTAGACTACCTGCACAGACATGGAATCATCCATAGGGATTTGAAACCGGACAATATGCTTATTT
 CCAATGAGGGTCATATTAAGTACAGATTTTGGCCTTTCCAAAGTTACTTTGAATAGAGACATCAATAT
 GATGGATATTCTACAACACCATCAATGTCTAAACCTAAGCAAGATTATTCAAGAACTCCAGGACAAGTC
 TTATCTCTCATCAGTTCTTTGGGATTTTTCACACCAAGTTGGAGAAAAAGATCAAGACTCTGCAAAACATGT
 TTTTCAGCCCTAAGTCTGCTGCACAACCTTCTCGAGGATTCATTTGTCCTATGTCTGTAGATCAGAAAGGA
 GCCGACTTCTTATTCGAGCAAACTGCTAAAATCATGTTTTGAAACCCCTTCATCCAATCCAGAAATACCT
 GTGAAATGTCTGACTTCTAATCTACTCCAGTGTAGGAAAAGACTGGGTACCTCAAGTACTAGTAGCCAGT
 CTCATACCTTCGTATCCAGTGTGGAGTCAGAATGCCACAGCAATCCCAATGGGAAAGAGACTGCCAGAG
 TACCGAATCATCAGGCTGTGCAATGAGCTGGAATGCAGTTGAAATGCTGTATGCAAAATCTACAAGTGCC
 ATCAAGACAAAAACAGAACTGGAATTAGCACTTTCTCCATTATGACAGCAGTGCCATTCCTGCTGCTG
 GAAGCAACCAGGTGACCTCCCTAGAAAATGCTTCAGGGAAATCTCTTGGGAAGCAAGGGACCCAGATAA
 TGAGAACATGACCATTGACAAGGGACAGTCTGGTTTCTGTCTCAGTCCAGTCAGAGGTCTGTAAATCTAGT
 GCTACATCTGAAGAACACCTTGGTAAAAGAAATTATAAAAGAAATTTCCACTTGGTTGACTCCAGTCCTT
 GTCAGGAAATTATGCAAAGTAAAAAACTGTACAGAGTATGAGGCCAATAAGGAAAGGCAAGGCTGCCG
 TGCAAATCAAAGTACAGGCTTGACAACCGAAGTCCAGAACCTGAAGCTATCAGGGTGTGAAAGTCAGCAA
 CTTGACTATGCCAATAAGGAGAACATTGTCACCTATTTAACTGACAGACAAACCCAGAAAACTGCATA
 TACCAACGATAGCAAAGAACCTTATGTCTGAAGTATGAGACTGTGAGCTGAGCAGTAAAAAGGACTG
 CCTCAGTTCTAATTCTGTATGTTCTGATGAGGATAGAGCTTTAAACTACCTGTGTGGATTCTGGATTCA
 TCTTTTCTGGAGTGTCTATGATGGAGAGTTCACTGGAAATTCAGGCCTTAGAACAGATAAAAGCATCA
 GAGACTACTCTTTTGAAGAACCAAACTGAAGATCTATTTGTGTACCAAAATGCCAAGAAAATTCCTT
 GCCACAAGATGACTGCCATGCTTGTATCCAAGACAGTAGCCAAGTGTGAGCTCATCCCTCAAAGGCGCCC
 AAAGCATTGACCTCTAAAATCAACGTCGTGGCTTTTCAAGTTTTAACAGTCATATTAACGCATCTACTA
 ATTCGGAACCATCCAAAATCAGCATAAATCTTTAGATGCTATGGACATTTCTGTGATTACAGTGGTTC
 ATACCCCATGGCTGTGAGCCCTACTGAGAAAGGAAGGCACTACACGTACATCAGACTCCAAATCAGGTC
 AAGTTGGGAACATCATACAGAACTCAAAGAGTGTGAGAAGAGGGGCAGCCCCAGTAGATGACGGGCGAA
 TTCTAGGGACTCCAGATTACCTGGCACCTGAGCTCTTACTGGGTACAGCCCATGGTCTGCAGTAGACTG
 GTGGGCTCTTGGAGTTTGCTTGTTCGAATTTCTGACAGGAATCCCCCTTTCAATGATGAAACACCACAA
 CAAGTATTCCAGAATATTTTAAAAAGAGATATCCCATGGCCAGAAGGCGAAGAAAAGCTATCTGATAATG
 CTCAAAGTGCAATGGACATGCTTTTAACCATGATGATTCAAAGAGAGCTGGAATGAGAGAACTAAACA
 GCATCCTCTCTTCAGTGAAGTGGACTGGGAAAATCTGCAGCATCAGACTATGCCTTTCTGACCCCAACCA
 GACGACGAAACAGATACATCCTATTTTGAAGCCAGAAATAATGCTCAACATCTGACCATATCTGGGTTTA
 GTCTGT**AG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_025979

Insert Size:

2598 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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_025979.4, NP_080255.3</u>
RefSeq Size:	4652 bp
RefSeq ORF:	2598 bp
Locus ID:	67121
UniProt ID:	<u>Q8C0P0</u>
Cytogenetics:	2 A3
Gene Summary:	Serine/threonine kinase that plays a key role in M phase by acting as a regulator of mitosis entry and maintenance. Acts by promoting the inactivation of protein phosphatase 2A (PP2A) during M phase: does not directly inhibit PP2A but acts by mediating phosphorylation and subsequent activation of ARPP19 and ENSA at 'Ser-62' and 'Ser-67', respectively. ARPP19 and ENSA are phosphatase inhibitors that specifically inhibit the PPP2R2D (PR55-delta) subunit of PP2A. Inactivation of PP2A during M phase is essential to keep cyclin-B1-CDK1 activity high. Following DNA damage, it is also involved in checkpoint recovery by being inhibited (By similarity).[UniProtKB/Swiss-Prot Function]