

Product datasheet for **MC223855**

Myt1l (NM_001093778) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myt1l (NM_001093778) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Myt1l
Synonyms:	2900046C06Rik; 2900093J19Rik; C630034G21Rik; mKIAA1106; Nztf1; Pmng1; Png-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223855 representing NM_001093778 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGTGGACTCTGAGGAGAAGCGCCATCGCACACGGTCCAAAGGGTTTCGAGTTCCTGTGGAGCCAG
CCATACAAGAGCTGTTCCAGCTGTCCACTCCAGGCTGCGACGGCAGTGGTACGTCAGTGGCAAATATGC
ACGACACAGAAGTGTATATGGTTGCCCTTGGCTAAAAAAGAAAAACGCAAGATAAACAGCCCCAAGAA
CCTGCTCCAAGCGAAAACCATTTGCAGTAAAAGCAGATAGTTCCCTCAGTAGACGAATGTTATGAGAGTG
ATGGTACTGAAGACATGGATGATAAGGAGGAAGATGATGATGAGGAGTTCCTGAAGACAATGATGAGCA
AGGGGATGATGACGACGAAGATGAGGTGGATCGGGAAGACGAGGAGGAGATCGAGGAGGAAGATGATGAA
GAAGATGATGATGATGAAGATGGTGACGATGTAGAAGAGGAAGAAGAGGATGATGATGAAGAGGAGGAAG
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TGATAACAACAATGATGAGTATGATAACTATGATGAACTGGTAGCTAAGTCGCTATTAATCTTGGCAAA
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AGGACGATAGTGACAAAAACGAAAACCTCGGTGCGAAAAGCGAACTGAGTCTAGACTTAGACAGTGTGT
TGTTAGAGAAAACAGTGGACTCCCTTAAGCTGTTAGCACAAGGACATGGTGTGTGCTATCAGAGAATATC
AGTGACAGAAGTTATGCTGAGGGGATGTCACAGCAGGACAGTAGAAATATGAATGATGTCATGCTAGGGA
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AGAGTGCCTGAGGAACCAAGTGTCTTGGACCTGGCCAGGAACTCAGCGAGACCAACCCACAGGACAGGAGT
CAGCCACCCAACATGAGTGTGCGCAACATGTCCGGCAAGAGGACGACTCCCTGGGAGGACGCCAGACA
GGAGCTACTCGGATATGATGAACCTTATGCGGCTGGAGGAGCAGCTCAGTCCCAGGTCTAGAAGTCTCTC
CAGCTGTGCCAAGGAGGATGGGTGTCATGAGAGGGATGATGACACCCTCAGTGAACCTCAGACAGGTCT
GAGGAAGTGTGTTGACATGACCAAGGGCAACCTGACTCTGCTAGAGAAAGCCATTGCCCTGGAGACAGAGA
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CCAGTCTCCAAGACAGCTGGCTGGGAAGACAGAAAATCAAATCCAGTGACAGCCATGTCAAAAAGCCA



TACTATGATCCCTCAAGAACAGAAAAGAGAGAGCAAGTGTCCAACCCCGGGTGTGATGGAACCGGCC
 ACGTAACTGGGCTTTACCCGCATCACCGCAGTCTGTCTGGATGCCCGCACAAAGATAGGGTCCCTCCAGA
 AATTCTTGCCATGCATGAAAATGTTCTCAAGTGTCCCCTCCAGGCTGCACAGGGCGAGGGCATGTGAAT
 AGCAACAGGAACCGCACAGAAGCCTCTCTGGATGCCCATTTGCTGCTGCAGAAAACTGGCAAAGGCC
 AAGAGAAAACCCAGAGCTGTGATGTGTCCAATCCAACCAGGCCTCAGACCGAGTCTCAGGCCAATGTG
 CTTTGTCAAACAGCTTGAGATTCCTCAGTATGGCTACAGAAAATGTTCCACAACCACCCAGCTCC
 AACCTGGCCAAGGAGCTTGAGAAAATACTCCAAGACTTCGTTTGTAGTACAACAGTTACGACAACCATCTT
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 GCGGTAAGTGAAGAATGCCAGCCCCAGCAGCAGCACCACCAGCAGCTATGCACCTAGCAGCAGCAGCAAC
 CTCAGCTGTGGTGGTGGCAGCAGCGCCAGTAGCACGTGTAGCAAGAGCAGCTTTGACTACACACATGACA
 TGGAGGCCGCACACATGGCAGCCACAGCCATTCTCAACCTGTCCACACGTTGTCGTGAAATGCCACAGAA
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 TGTCTCCGACGACAGCGCGTGTGATGAGCAGCCGATGCTTCCAGCTGAGCGAGGGGATTGCTGGGACTT
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 GACTTGGACCCATTCCAGGAGGCTCTGGAAGAAAGACGGTATCCAGGGGAGGTGACCATCCCAAGCCCA
 AACCCAAGTACCCTCAGTGAAGGAAAGCAAAAAGGACTTAATAACTCTGTCTGGCTGCCCCCTGGCGGA
 CAAAAGCATTGCAAGTATGCTGGCCACCAGTTCCTCAAGAGCTCAAGTGCCCCACCCTGGCTGTGACGGT
 TCTGGACACATCACTGGCAATTACGCTTCTCATCGAAGCCTTCTGGGTGCCCGAGAGCAAGAAGAGTG
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 TGACGGTCAGGGACACATCACTGGGAAGTATGCATCCCACCGCAGCGCCTCCGGGTGTCCCTGGCAGCC
 AAGAGGCAGAAAAGATGGGTACCTTAATGGCTCCCAGTTCTCTGGAAGTCGGTCAAGACGGAGGGCATGT
 CCTGCCCTACCCCGGGTGTGATGGGTGAGGACAGTCAAGTGGCAGCTTCCCTCACACCCGACGCTTGT
 AGGATGTCCAAGAGCCACATCAGCAATGAAGAAAGCAAAGCTGTCTGGAGAACAGATGTTGACTATCAAG
 CAGCGAGCCAGCAACGGTATAGAAAATGATGAAGAAATCAAGCAGTTAGATGAAGAGATCAAGGAGCTTA
 ATGAGTCCAATCCAGATGGAGGCTGACATGATCAAACCTCAGAACTCAGATCACCACAATGGAGAGCAA
 CCTGAAGACGATTGAGGAGGAGAACAAGTCATTGAACAGCAGAAATGAGTCGCTCTTGCACGAGTTGGCC
 AACCTGAGCCAGTCCCTGATCCACAGCCTCGCCAACATCCAGCTGCCTCACATGGATCCAATCAATGAAC
 AAAATTTTGTGCTTACGTGACTACTTTGACGGAAATGTATACAAATCAAGATCGTTATCAGAGTCCAGA
 AAATAAAGCCCTACTGAAAAATATAAAGCAGGCTGTGAGAGGAATTCAGGTCGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_001093778

Insert Size:

3555 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.

RefSeq: [NM_001093778.1](#), [NP_001087247.1](#)

RefSeq Size: 7189 bp

RefSeq ORF: 3555 bp

Locus ID: 17933

Cytogenetics: 12 11.86 cM

Gene Summary: Transcription factor that plays a key role in neuronal differentiation by specifically repressing expression of non-neuronal genes during neuron differentiation (PubMed:28379941). In contrast to other transcription repressors that inhibit specific lineages, mediates repression of multiple differentiation programs (PubMed:28379941). Also represses expression of negative regulators of neurogenesis, such as members of the Notch signaling pathway, including HES1 (PubMed:28379941). The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into induced neuronal (iN) cells in vitro (PubMed:20107439, PubMed:24243019, PubMed:27281220). Directly binds the 5'-AAGTT-3' core motif present on the promoter of target genes and represses transcription by recruiting a multiprotein complex containing SIN3B (PubMed:28379941). The 5'-AAGTT-3' core motif is absent from the promoter of neural genes (PubMed:28379941).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) uses alternate in-frame splice sites in the 5' and mid-coding regions, compared to variant 1, resulting in a shorter protein (isoform 3).