

Product datasheet for MC208051

Yy1 (NM_009537) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Yy1 (NM_009537) Mouse Untagged Clone

Tag: Tag Free

Symbol: Yy1

Synonyms: AW488674; NF-E1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC208051 representing NM_009537

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGATCGAGGTGGAGACCATCCCGGTGGAGACCATCGAGACCACGGTGGTGGGCGAGGAGGAGGAGGA CACCACCATCACCACCACCACCACCACCACCACCCGCCCATGATCGCGCTGCAGCCGCTGGTGACGG ACGACCCGACCCAGGTGCACCACCACCAGGAGGTGATCCTGGTGCAGACGCGCGAGGAGGTGGTCGGCGG GGACGACTCGGACGGCCTGCGCCCGAGGACGGCTTCGAGGACCAGATCCTCATCCCGGTGCCCGCGCCG GGGCCTCGTCGGGCGGCGGTCGCGTGAAGAAGGGCGGCGGCAAGAAGAGCGGCAAGAAGAGTTACCTGGG CGGCGGGCCGGCGGCGGCGGCGGCGCCGCCCGACCCGGGGAATAAGAAGTGGGAGCAGAAGCAGGTG ATGAAACAGTGGTTGAAGAGCAGATCATTGGAGAGAACTCACCTCCTGATTATTCTGAATATATGACAGG CAAGAAACTCCCTCCTGGAGGGATACCTGGCATTGACCTCTCAGACCCTAAGCAACTGGCAGAATTTGCC AGAATGAAGCCAAGAAAAATTAAAGAAGATGATGCTCCAAGAACAATAGCTTGCCCTCATAAAGGCTGCA CAAAGATGTTCAGGGATAACTCTGCTATGAGAAAGCATCTGCACACCCACGGTCCCAGAGTCCACGTCTG TGCAGAGTGTGGCAAAGCGTTCGTTGAGAGCTCAAAGCTAAAACGACACCAGCTGGTTCATACTGGAGAA AAGCCCTTTCAGTGCACATTCGAAGGCTGCGGGAAGCGCTTTTCACTGGACTTCAATTTTGCGCACACATG TGCGAATCCATACCGGAGACAGGCCCTATGTGTGCCCCTTCGACGGTTGTAATAAGAAGTTTGCTCAGTC AACTAACCTGAAATCTCACATCTTAACACACGCTAAAGCCAAAAACAACCAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites: Sgfl-Mlul
ACCN: NM_009537
Insert Size: 1245 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 009537.3, NP 033563.2</u>

 RefSeq Size:
 2324 bp

 RefSeq ORF:
 1245 bp

 Locus ID:
 22632

 UniProt ID:
 Q00899

Cytogenetics: 12 59.58 cM



Gene Summary:

Multifunctional transcription factor that exhibits positive and negative control on a large number of cellular and viral genes by binding to sites overlapping the transcription start site. Binds to the consensus sequence 5'-CCGCCATNTT-3'; some genes have been shown to contain a longer binding motif allowing enhanced binding; the initial CG dinucleotide can be methylated greatly reducing the binding affinity. The effect on transcription regulation is depending upon the context in which it binds and diverse mechanisms of action include direct activation or repression, indirect activation or repression via cofactor recruitment, or activation or repression by disruption of binding sites or conformational DNA changes. Its activity is regulated by transcription factors and cytoplasmic proteins that have been shown to abrogate or completely inhibit YY1-mediated activation or repression. Binds to the upstream conserved region (UCR) (5'-CGCCATTTT-3') of Moloney murine leukemia virus (MuLV). Acts synergistically with the SMAD1 and SMAD4 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression (PubMed:15329343). Binds to SMAD binding elements (SBEs) (5'-GTCT/AGAC-3') within BMP response element (BMPRE) of cardiac activating regions (PubMed:15329343). Proposed to recruit the PRC2/EED-EZH2 complex to target genes that are transcriptional repressed. Involved in DNA repair. In vitro, binds to DNA recombination intermediate structures (Holliday junctions). Involved in spermatogenesis and may play a role in meiotic DNA double-strand break repair. Plays a role in regulating enhancer activation (By similarity).[UniProtKB/Swiss-Prot Function]