

### Product datasheet for MR206531L4V

## OriGene Technologies, Inc.

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# Yy1 (NM\_009537) Mouse Tagged ORF Clone Lentiviral Particle

#### **Product data:**

Product Type: Lentiviral Particles

**Product Name:** Yy1 (NM\_009537) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Yy1

Synonyms: AW488674; NF-E1

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_009537 **ORF Size:** 1242 bp

**ORF Nucleotide** 

- 1

Sequence:

The ORF insert of this clone is exactly the same as(MR206531).

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.

**RefSeg:** NM 009537.3

 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]