

PRODUCT DATA SHEET

Bioworld Technology,Inc.

YY1 Rabbit monoclonal antibody

Catalog: MB66406 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

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 dinucle-otide 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.

For example, it acts as a repressor in absence of adenovirus E1A protein but as an activator in its presence.

Acts synergistically with the SMAD1 and SMAD4 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.

Binds to SMAD binding elements (SBEs) (5'-GTCT/AGAC-3') within BMP response element (BMPRE) of cardiac activating regions.

May play an important role in development and differentiation. 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). Plays a role in regulating enhancer activation.

Proposed core component of the chromatin remodeling

INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair; proposed to target the INO80 complex to YY1-responsive elements.

Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Molecular Weight:

~ 65 kDa

Swiss-Prot:

P25490

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IP (1/10 - 1/50)

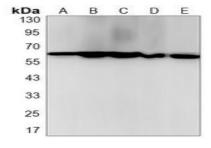
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of YY1 protein.

DATA:



Western blot analysis of YY1 expression in K562 (A), rat brain (B), C6 (C), NIH3T3 (D), Hela (E) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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