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YY1 Antibody

Rabbit mAb
Catalog # AP90213

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P25490
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	YY1, Delta transcription factor, INO80 complex subunit S, NF-E1, Yin and yang 1, YY-1
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	44713

Additional Information

Dilution	WB 1:500~1:3000 IHC 1:50~1:200 ICC/IF 1:100~1:500 IP 1:50~1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human YY1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

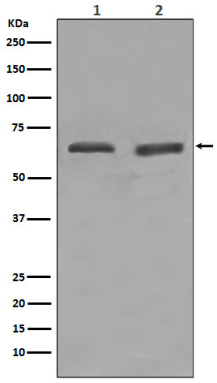
Protein Information

Name	YY1
Synonyms	INO80S
Function	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 (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). 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 (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). 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 (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). Its activity is regulated by transcription factors and cytoplasmic proteins that have been shown to abrogate or completely inhibit YY1- mediated activation or repression (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). For example, it acts as a repressor in absence of adenovirus E1A protein but as an activator in its presence (PubMed:1655281). 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). May play an important role in development and differentiation. Proposed to recruit the PRC2/EED-EZH2 complex to target genes that are transcriptional repressed (PubMed:11158321). Involved in DNA repair (PubMed:18026119, PubMed:28575647). In vitro, binds to DNA recombination intermediate structures (Holliday junctions). Plays a role in regulating enhancer activation (PubMed:28575647). Recruits the PR-DUB complex to specific gene-regulatory regions (PubMed:20805357).

Cellular Location Nucleus matrix Note=Associated with the nuclear matrix.

Images



Western blot analysis of YY1 expression in (1) HeLa cell lysate; (2) Daudi cell lysate.

Image not found : 202311/AP90213-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human bladder using YY1 Antibody.

Image not found : 202311/AP90213-IF.jpg

Immunofluorescent analysis of Hela cells, using YY1 Antibody.