

KD-Validated Anti-YY1 Mouse Monoclonal Antibody
Mouse monoclonal antibody
Catalog # AGI1988**Specification****KD-Validated Anti-YY1 Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	P25490
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2a
Calculated MW	Predicted, 45 kDa, observed, 60 kDa
Gene Name	YY1
Aliases	YY1; YY1 Transcription Factor; INO80S; NF-E1; INO80 Complex Subunit S; YIN-YANG-1; DELTA; UCRBP; Transcriptional Repressor Protein YY1; Delta Transcription Factor; Yin And Yang 1 Protein; YY-1; Yin And Yang 1; GADEVS
Immunogen	Recombinant protein of human YY1

KD-Validated Anti-YY1 Mouse Monoclonal Antibody - Additional Information

Gene ID	7528
Other Names	Transcriptional repressor protein YY1, Delta transcription factor, INO80 complex subunit S, NF-E1, Yin and yang 1, YY-1, YY1, INO80S

KD-Validated Anti-YY1 Mouse Monoclonal Antibody - 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](http://www.uniprot.org/citations/15329343), PubMed: [17721549](http://www.uniprot.org/citations/17721549), PubMed: [24326773](http://www.uniprot.org/citations/24326773), PubMed: [25787250](http://www.uniprot.org/citations/25787250)). Binds to the consensus sequence 5'-CCGCATNTT-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](http://www.uniprot.org/citations/15329343), PubMed: [17721549](http://www.uniprot.org/citations/17721549), PubMed: [24326773](http://www.uniprot.org/citations/24326773), PubMed: [25787250](http://www.uniprot.org/citations/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

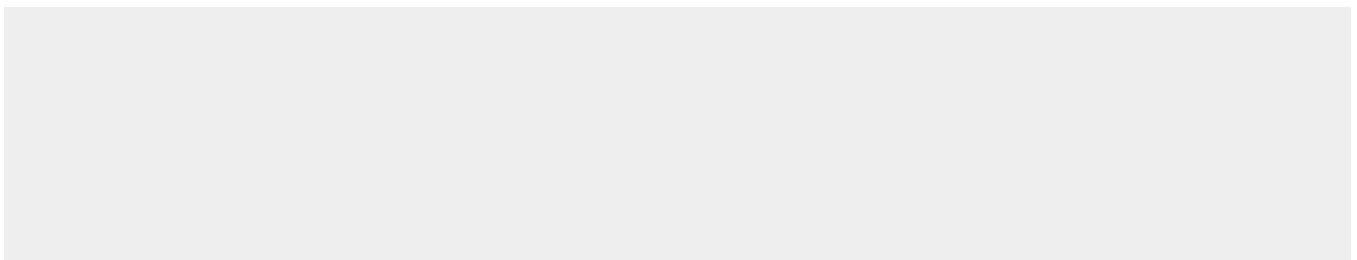
Nucleus matrix Note=Associated with the nuclear matrix.

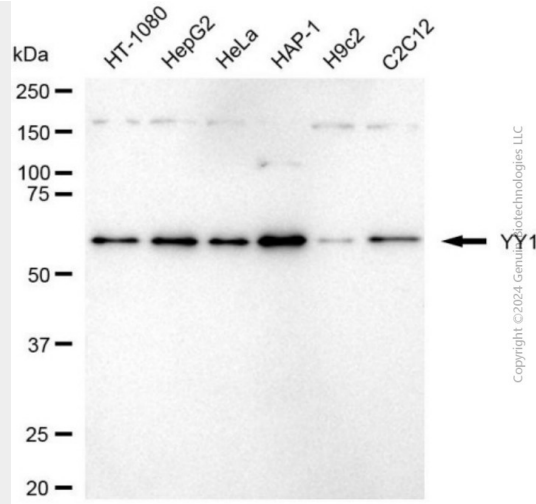
KD-Validated Anti-YY1 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

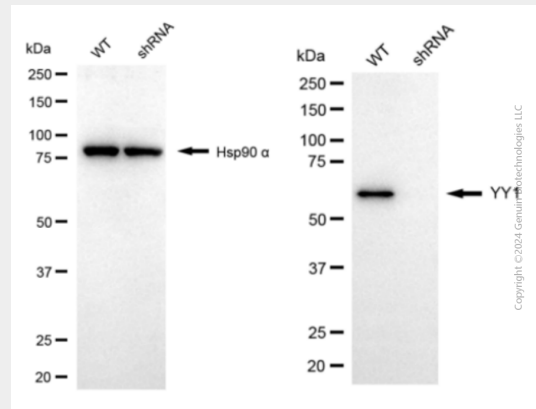
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-YY1 Mouse Monoclonal Antibody - Images





Western blotting analysis using anti-YY1 antibody (Cat#AGI1988). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-YY1 antibody (Cat#AGI1988, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-YY1 antibody (Cat#AGI1988). YY1 expression in wild-type (WT) and YY1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-YY1 antibody (Cat#AGI1988, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.