

# Product datasheet

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# ARG55022 anti-YY1 antibody [1183CT6.5.23.6]

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Mouse Monoclonal antibody recognizes YY1

Tested Reactivity Hu
Tested Application WB

Host Mouse

Clonality Monoclonal
Clone 1183CT6.5.23.6

Isotype IgG2a
Target Name YY1

Immunogen Purified His-tagged YY1 protein.

Conjugation Un-conjugated

Alternate Names YY-1; UCRBP; INO80S; NF-E1; Delta transcription factor; Yin and yang 1; DELTA; YIN-YANG-1;

Transcriptional repressor protein YY1; INO80 complex subunit S

## **Application Instructions**

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Daudi	

# **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Database links GenelD: 7528 Human

Swiss-port # P25490 Human

Gene Symbol YY1

Gene Full Name YY1 transcription factor

Background YY1 is a ubiquitously distributed transcription factor belonging to the GLI-Kruppel class of zinc finger

proteins. The protein is involved in repressing and activating a diverse number of promoters. YY1 may direct histone deacetylases and histone acetyltransferases to a promoter in order to activate or repress the promoter, thus implicating histone modification in the function of YY1. [provided by RefSeq, Jul

2008]

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. 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. 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 (PubMed:15329343). 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).

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. [UniProt]

Research Area Controls and Markers antibody; Gene Regulation antibody; Neuroscience antibody

Calculated Mw 45 kDa

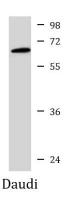
PTM Transiently poly-ADP-ribosylated by PARP1 upon DNA damage, with the effect of decreasing affinity of

YY1 to its cognate DNA binding sites.

Ubiquitinated.

Cellular Localization Nucleus matrix Note=Associated with the nuclear matrix

#### **Images**



#### ARG55022 anti-YY1 antibody WB image

Western blot: 35  $\mu g$  of Daudi cell lysate stained with ARG55022 anti-YY1 antibody.