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YY1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2517c

Specification

YY1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P25490

YY1 Antibody (Center) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2517c was selected from the Center region of human YY1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

YY1 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/15329343"

target="_blank">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.

YY1 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

YY1 Antibody (Center) Blocking Peptide - Images

YY1 Antibody (Center) Blocking Peptide - 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.

YY1 Antibody (Center) Blocking Peptide - References

Sucharov, C.C., et al., J. Biol. Chem. 278(33):31233-31239 (2003).Kurisaki, K., et al., Mol. Cell. Biol.

23(13):4494-4510 (2003).Huang, N.E., et al., Biochem. Biophys. Res. Commun. 306(1):267-275 (2003).Moriuchi, M., et al., J. Biol. Chem. 278(15):13003-13007 (2003).Hiromura, M., et al., J. Biol. Chem. 278(16):14046-14052 (2003).