

YY1 antibody (pAb)

Catalog Nos: 61779, 61980, 61780

RRID: AB_2793763

Application(s): ChIP-Seq, CUT&Tag, IHC, IP, WB

Reactivity: Human

Volumes: 100 µl, 50 µl, 10 µl

Purification: Affinity Purified

Host: Rabbit

Isotype: IgG

Molecular Weight: 63 kDa

Background: YY1 (Yin Yang 1) is a transcription factor that belongs to the GLI-Kruppel class of zinc finger transcription factors and is ubiquitously expressed. YY1 is known to have a fundamental role in normal biologic processes such as embryogenesis, differentiation, replication and cellular proliferation. YY1 exerts its effects on genes involved in these processes via its ability to initiate, activate or repress transcription depending upon the context in which it binds. Since expression and function of YY1 are known to be intimately associated with progression through phases of the cell cycle, the physiologic significance of YY1 activity has been applied to models of tumor biology. It can repress and activate a number of gene promoters and direct histone deacetylases (HDACs) and histone acetyltransferases (HATs).

Immunogen: This antibody was raised against a recombinant protein corresponding to amino acids 249-414 of human YY1.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

ChIP-Seq: 10 µl per ChIP

IP: 0.5 - 4 µl per IP

WB*: 1:1,000 - 1:5,000 dilution

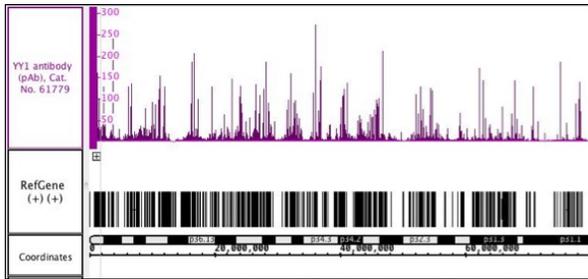
IHC (FFPE): 1:1,000 dilution

CUT&RUN: 1 µl per 50 µl reaction

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

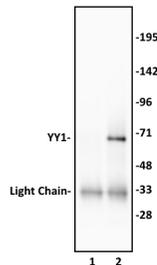


YY1 antibody (pAb) tested by ChIP-Seq.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from HeLa cells and 10 µl of YY1 antibody. ChIP DNA was sequenced on the Illumina NextSeq and 11.6 million sequence tags were mapped to identify YY1 binding sites.

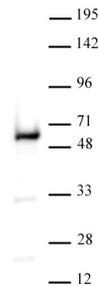
YY1 antibody (pAb) tested by Immunoprecipitation.

2 µl of YY1 antibody was used to immunoprecipitate YY1 from 250 µg of Raji nuclear cell extract (lane 2). 2 µl of rabbit IgG was used as a negative control (lane 1). The immunoprecipitated protein was detected by Western blotting using the YY1 antibody at a dilution of 1:1,000.



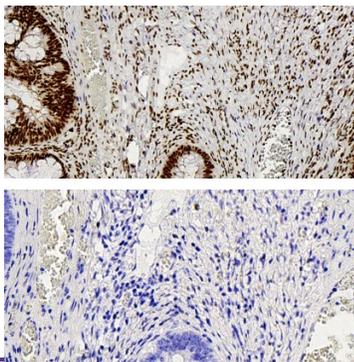
YY1 antibody (pAb) tested by Western blot.

Nuclear extract (20 µg) from HeLa cells probed with YY1 antibody at a 1:2,000 dilution.



YY1 antibody (pAb) tested by Immunohistochemistry

Nuclear staining pattern is detected in Formalin-fixed, paraffin-embedded tissue sections from human adenocarcinoma. Top Panel: YY1 antibody at 1:1000 dilution. Bottom Panel: No primary antibody (2nd step antibody alone)



YY1 antibody (pAb) tested by CUT&RUN

CUT&RUN was performed using 500,000 K562 nuclei and sequenced using 38 base-pair, paired-end reads on the Illumina NovaSeq. Data was collected from 54 million reads, and YY1 data is shown for Chromosome 19.

