SANTA CRUZ BIOTECHNOLOGY, INC.

NF-YA (H-209): sc-10779



BACKGROUND

The CCAAT-binding factor NF-Y is a heteromeric transcription factor that specifically binds to CCAAT sequences in many eukaryotic genes. NF-Y is made up of three subunits, NF-YA, NF-YB and NF-YC. All three components are necessary for DNA binding. In each NF-Y subunit, the segment needed for formation of the NF-Y-DNA complex is conserved from yeast to human. These conserved segments are homologous to the histone-fold motif of eukaryotic histones. The DNA binding domains of the NF-YB and NF-YC subunits have been suggested to interact through a protein-protein histone-fold "handshake" motif in a manner analogous to the histone proteins, H2B and H2A, respectively.

CHROMOSOMAL LOCATION

Genetic locus: NFYA (human) mapping to 6p21.1; Nfya (mouse) mapping to 17 C.

SOURCE

NF-YA (H-209) is a rabbit polyclonal antibody raised against amino acids 139-347 mapping at the C-terminus of NF-YA of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10779 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

NF-YA (H-209) is recommended for detection of NF-YA of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NF-YA (H-209) is also recommended for detection of NF-YA in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NF-YA siRNA (h): sc-29947, NF-YA siRNA (m): sc-29948, NF-YA shRNA Plasmid (h): sc-29947-SH, NF-YA shRNA Plasmid (m): sc-29948-SH, NF-YA shRNA (h) Lentiviral Particles: sc-29947-V and NF-YA shRNA (m) Lentiviral Particles: sc-29948-V.

NF-YA (H-209) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NF-YA: 30-50 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, K-562 whole cell lysate: sc-2203 or NF-YA (m): 293T Lysate: sc-122034.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA





NF-YA (H-209): sc-10779. Western blot analysis of NF-YA expression in non-transfected: sc-117752 (A) and mouse NF-YA transfected: sc-122034 (B) 293T whole cell lysates.

NF-YA (H-209): sc-10779. Western blot analysis of NF-YA expression in A-431 $({\rm A})$ and K-562 $({\rm B})$ whole cell lysates.

SELECT PRODUCT CITATIONS

- 1. Zhou, Y., et al. 2003. DNA damage-induced inhibition of securin expression is mediated by p53. J. Biol. Chem. 278: 462-470.
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- Benatti, P., et al. 2011. Specific inhibition of NF-Y subunits triggers different cell proliferation defects. Nucleic Acids Res. 39: 5356-5368.
- 9. Caretti, A., et al. 2012. DNA methylation and histone modifications modulate the β 1,3 galactosyltransferase β 3Gal-T5 native promoter in cancer cells. Int. J. Biochem. Cell Biol. 44: 84-90.
- 10. Lee, L.C., et al. 2012. Role of the CCAAT-binding protein NFY in SCA17 pathogenesis. PLoS ONE 7:e35302.



Try NF-YA (G-2): sc-17753, our highly recommended monoclonal aternative to NF-YA (H-209). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see NF-YA (G-2): sc-17753.