

NF-YC (H-120): sc-13044

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.

REFERENCES

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2. Sinha, S., et al. 1996. Three classes of mutations in the A subunit of the CCAAT-binding factor CBF delineate functional domains involved in the three-step assembly of the CBF-DNA complex. *Mol. Cell. Biol.* 16: 328-337.
3. Currie, R.A. 1997. Functional interaction between the DNA binding subunit trimerization domain of NF-Y and high mobility group protein HMG-I(Y). *J. Biol. Chem.* 272: 30880-30888.
4. Maity, S.N. and de Crombrughe, B. 1998. Role of the CCAAT-binding protein CBF/NF-Y in transcription. *Trends Biochem. Sci.* 23: 174-178.
5. Liang, S.G. and Maity, S.N. 1998. Pathway of complex formation between DNA and three subunits of CBF/NF-Y. Photocross-linking analysis of DNA-protein interaction and characterization of equilibrium steps of subunit interaction and DNA binding. *J. Biol. Chem.* 273: 31590-31598.

CHROMOSOMAL LOCATION

Genetic locus: NFYC (human) mapping to 1p34.2; Nfyc (mouse) mapping to 4 D2.2.

SOURCE

NF-YC (H-120) is a rabbit polyclonal antibody raised against amino acids 1-120 of NF-YC 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13044 X, 200 µg/0.1 ml.

STORAGE

Store at 4° C, ****DO 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.

APPLICATIONS

NF-YC (H-120) is recommended for detection of NF-YC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (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-YC (H-120) is also recommended for detection of NF-YC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NF-YC siRNA (h): sc-37733, NF-YC siRNA (m): sc-37734, NF-YC shRNA Plasmid (h): sc-37733-SH, NF-YC shRNA Plasmid (m): sc-37734-SH, NF-YC shRNA (h) Lentiviral Particles: sc-37733-V and NF-YC shRNA (m) Lentiviral Particles: sc-37734-V.

NF-YC (H-120) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NF-YC: 40 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, NIH/3T3 nuclear extract: sc-2138 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Huang, T.J., et al. 2005. Novel autoregulatory function of hepatitis B virus M protein on surface gene expression. *J. Biol. Chem.* 280: 27742-27754.
2. Zhu, H., et al. 2007. Regulation of acetylcholinesterase expression by calcium signaling during calcium ionophore A23187- and thapsigargin-induced apoptosis. *Int. J. Biochem. Cell Biol.* 39: 93-108.
3. Morachis, J.M., et al. 2010. Regulation of the p53 transcriptional response by structurally diverse core promoters. *Genes Dev.* 24: 135-147.
4. Murai-Takeda, A., et al. 2010. NF-YC functions as a corepressor of agonist-bound mineralocorticoid receptor. *J. Biol. Chem.* 285: 8084-8093.


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Try **NF-YC (G-12): sc-390985** or **NF-YC (C-2): sc-390861**, our highly recommended monoclonal alternatives to NF-YC (H-120).