

NF-YC (7-3B): sc-101099

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., Kim, I.S., Sohn, K.Y., de Crombrugge, B. and Maity, S.N. 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 Crombrugge, 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.
6. Mantovani, R. 1998. A survey of 178 NF-Y binding CCAAT boxes. *Nucleic Acids Res.* 26: 1135-1143.

CHROMOSOMAL LOCATION

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

SOURCE

NF-YC (7-3B) is a mouse monoclonal antibody raised against recombinant NF-YC of human origin.

PRODUCT

Each vial contains 100 µg IgG₃ kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

NF-YC (7-3B) is recommended for detection of NF-YC of mouse, rat and human origin by 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).

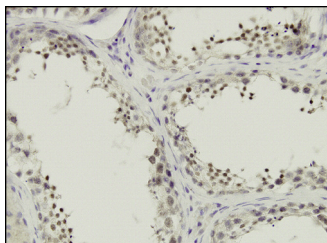
Suitable for use as control antibody for NF-YC siRNA (h): sc-37733, NF-YC siRNA (m): sc-37734, NF-YC shRNA Plasmid (h): sc-37733-SH, NF-YC shRNA Plasmid (m): sc-37734-SH, NF-YC shRNA (h) Lentiviral Particles: sc-37733-V and NF-YC shRNA (m) Lentiviral Particles: sc-37734-V.

Molecular Weight of NF-YC: 40 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



NF-YC (7-3B): sc-101099. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human testis tissue showing nuclear localization.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.