

## CBF-A (L-20): sc-30904

### BACKGROUND

The CCAAT-binding factor CBF (also designated NFY or CP1) is a heteromeric transcription factor that specifically binds to CCAAT sequences in many eukaryotic genes. CBF is made up of three subunits, CBF-A, CBF-B, and CBF-C. All three components are necessary for DNA binding. In each CBF subunit, the segment needed for formation of the CBF-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 CBF-A and CBF-C 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 Crombrughe, 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 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.
6. Mantovani, R. 1998. A survey of 178 NF-Y binding CCAAT boxes. *Nucleic Acids Res.* 26: 1135-1143.

### SOURCE

CBF-A (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CBF-A 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.

Blocking peptide available for competition studies, sc-30904 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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

CBF-A (L-20) is recommended for detection of CBF-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CBF-A siRNA (h): sc-29945 and CBF-A siRNA (m): sc-29946.

Molecular Weight of CBF-A: 32 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.