## SANTA CRUZ BIOTECHNOLOGY, INC.

# NF-YC (C-19): sc-7714



## 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 "hand-shake" motif in a manner analogous to the histone proteins, H2B and H2A, respectively.

## CHROMOSOMAL LOCATION

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

#### SOURCE

NF-YC (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NF-YC of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG 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-7714 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-7714 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

NF-YC (C-19) 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  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and 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 (C-19) is also recommended for detection of NF-YC in additional species, including equine, canine, bovine and porcine.

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 (C-19) 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 + PMA nuclear extract: sc-2121.

## 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



expression in K-562 (**A**), NIH/3T3 (**B**), untreated (**C**) and phorbol-treated HeLa (**D**) nuclear extracts.

#### SELECT PRODUCT CITATIONS

- Tanabe, O., et al. 2002. An embryonic/fetal β-type globin gene repressor contains a nuclear receptor TR2/TR4 heterodimer. EMB0 J. 21: 3434-3442.
- Zhou, Y., et al. 2003. DNA damage-induced inhibition of securin expression is mediated by p53. J. Biol. Chem. 278: 462-470.
- 3. Takemaru, K.I., et al. 2004. Lymphoid enhancer factor-1 (LEF-1) links two hereditary leukemia syndromes through CBF $\alpha$  regulation of ELA2. J. Biol. Chem. 279: 2873-2884.
- 4. De Luca, A., et al. 2006. Identification and analysis of the promoter region of the human methionine sulphoxide reductase A gene. Biochem. J. 393: 321-329.
- Teran-Garcia, M., et al. 2007. Polyunsaturated fatty acid suppression of fatty acid synthase (FASN): evidence for dietary modulation of NF-Y binding to the Fasn promoter by SREBP-1c. Biochem J. 402: 591-600.
- Chen, S., et al. 2008. Bone morphogenetic protein 2 mediates dentin sialophosphoprotein expression and odontoblast differentiation via NF-Y signaling. J. Biol. Chem. 283: 19359-19370.
- Murai-Takeda, A., et al. 2010. NF-YC functions as a corepressor of agonistbound mineralocorticoid receptor. J. Biol. Chem. 285: 8084-8093.

#### PROTOCOLS

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

## MONOS Satisfation Guaranteed

Try NF-YC (G-12): sc-390985 or NF-YC (C-2): sc-390861, our highly recommended monoclonal aternatives to NF-YC (C-19).