

# NF-YA (C-18): sc-7712

## 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 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-7712 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-7712 X, 200 µg/0.1 ml.

## APPLICATIONS

NF-YA (C-18) 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), 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 (C-18) is also recommended for detection of NF-YA in additional species, including equine, canine, bovine 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 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, K-562 whole cell lysate: sc-2203 or A-431 whole cell lysate: sc-2201.

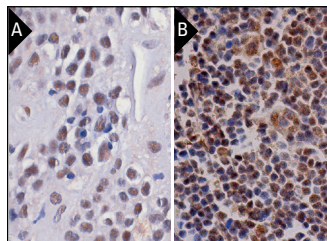
## RESEARCH USE

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

## STORAGE

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

## DATA



NF-YA (C-18): sc-7712. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lymphoma showing nuclear staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal and non-germinal centers (B).

## SELECT PRODUCT CITATIONS

- Bennett, M.K., 2000. Nutrient regulation of gene expression by the sterol regulatory element binding proteins: Increased recruitment of gene-specific coregulatory factors and selective hyperacetylation of histone H3 *in vivo*. *Proc. Natl. Acad. Sci. USA* 97: 6340-6344.
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- Jürchott, K., et al. 2010. Identification of Y-box binding protein 1 as a core regulator of MEK/ERK pathway-dependent gene signatures in colorectal cancer cells. *PLoS Genet.* 6: e1001231.
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- Su, B., et al. 2015. Interleukin-1 $\beta$ /interleukin-1 receptor-associated kinase 1 inflammatory signaling contributes to persistent Gankyrin activation during hepatocarcinogenesis. *Hepatology* 61: 585-597.


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Try **NF-YA (G-2): sc-17753**, our highly recommended monoclonal alternative to NF-YA (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **NF-YA (G-2): sc-17753**.