

YAF2 (D-21): sc-102161

BACKGROUND

Members of the myelocytomatosis viral oncogene homologue (Myc) family, which include c-Myc, N-Myc and L-Myc, encode transcription factors that play a role in the acceleration of cell cycle progression and cell growth, inhibition of cell differentiation, and initiation of programmed cell death (apoptosis). YY1-associated factor 2, also known as YAF2, is a 180 amino acid protein that binds to c-Myc and inhibits c-Myc-mediated pathways. It also binds to N-Myc, enhancing N-Myc-dependent transcriptional activation. Furthermore, YAF2 interacts with YY1 to antagonize YY1 transactivation of muscle-specific promoters. Localized to the nucleus, YAF2 contains an N-terminal C2-X10-C2 zinc finger and exists as two isoforms.

REFERENCES

1. Kalenik, J.L., et al. 1997. Yeast two-hybrid cloning of a novel zinc finger protein that interacts with the multifunctional transcription factor YY1. *Nucleic Acids Res.* 25: 843-849.
2. Bannasch, D., et al. 2001. Functional interaction of YAF2 with the central region of N-Myc. *Oncogene* 20: 5913-5919.
3. Sawa, C., et al. 2002. YEAF1/RYPB and YAF2 are functionally distinct members of a cofactor family for the YY1 and E4TF1/hGABP transcription factors. *J. Biol. Chem.* 277: 22484-22490.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607534. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Mädge, B., et al. 2003. YAF2 inhibits Myc biological function. *Cancer Lett.* 193: 171-176.
6. Kaneko, T., et al. 2003. The mouse YAF2 gene generates two distinct transcripts and is expressed in pre-and postimplantation embryos. *Gene* 315: 183-192.
7. Stanton, S.E., et al. 2006. YAF2 inhibits caspase 8-mediated apoptosis and regulates cell survival during zebrafish embryogenesis. *J. Biol. Chem.* 281: 28782-28793.

CHROMOSOMAL LOCATION

Genetic locus: YAF2 (human) mapping to 12q12.

SOURCE

YAF2 (D-21) is a purified rabbit polyclonal antibody raised against YAF2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

YAF2 (D-21) is recommended for detection of YAF2 of human and canine 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), 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 YAF2 siRNA (h): sc-95916, YAF2 shRNA Plasmid (h): sc-95916-SH and YAF2 shRNA (h) Lentiviral Particles: sc-95916-V.

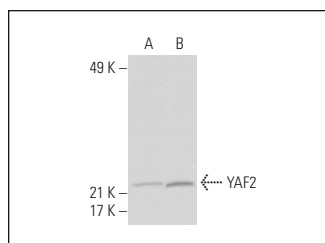
Molecular Weight of YAF2: 20 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



YAF2 (D-21): sc-102161. Western blot analysis of YAF2 expression in HeLa (A) and Jurkat (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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