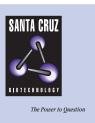
SANTA CRUZ BIOTECHNOLOGY, INC.

p400 (S-20): sc-66500



BACKGROUND

NuAR is a multi-protein histone acetyltransferase complex that functions to acetylate the nucleosomal Histones H4 and H2A, thereby activating transcription of select target genes. p400, also known as EP400 (E1A binding protein p400) or mDomino, localizes to the nucleus and is a component of the NuAR complex. Expressed in brain, liver, thymus, lung, spleen, colon and kidney, p400 regulates the transcriptional activity of proteins such as MZF-1 and contributes to the ATPase and helicase activities of NuA4. p400 is a SWI2/SNF2-related protein that can interact with the adenovirus oncoprotein E1A, thus activating the proapoptotic activity of E1A. The ability of p400 to regulate transcriptional and apoptotic activity suggests that the NuAR complex may be a crucial component of cell proliferation, transformation and, possibly, carcinogenesis. Five isoforms of p400 exist due to alternative splicing events.

REFERENCES

- Ogawa, H., Ueda, T., Aoyama, T., Aronheim, A., Nagata, S. and Fukunaga, R. 2003. A SWI2/SNF2-type ATPase/helicase protein, mDomino, interacts with myeloid zinc finger protein 2A (MZF-2A) to regulate its transcriptional activity. Genes Cells 8: 325-339.
- Chan, H.M., Narita, M., Lowe, S.W. and Livingston, D.M. 2005. The p400 E1A-associated protein is a novel component of the p53 → p21 senescence pathway. Genes Dev. 19: 196-201.
- Samuelson, A.V., Narita, M., Chan, H.M., Jin, J., de Stanchina, E., McCurrach, M.E., Narita, M., Fuchs, M., Livingston, D.M. and Lowe, S.W. 2005. p400 is required for E1A to promote apoptosis. J. Biol. Chem. 280: 21915-21923.
- Tyteca, S., Vandromme, M., Legube, G., Chevillard-Briet, M. and Trouche, D. 2006. Tip60 and p400 are both required for UV-induced apoptosis but play antagonistic roles in cell cycle progression. EMBO J. 25: 1680-1689.
- Turnell, A.S. and Mymryk, J.S. 2006. Roles for the coactivators CBP and p300 and the APC/C E3 ubiquitin ligase in E1A-dependent cell transformation. Br. J. Cancer 95: 555-560.
- Flinterman, M.B., Mymryk, J.S., Klanrit, P., Yousef, A.F., Lowe, S.W., Caldas, C., Gäken, J., Farzaneh, F. and Tavassoli, M. 2007. p400 function is required for the adenovirus E1A-mediated suppression of EGFR and tumour cell killing. Oncogene 26: 6863-6874.
- 7. Ueda, T., Watanabe-Fukunaga, R., Ogawa, H., Fukuyama, H., Higashi, Y., Nagata, S. and Fukunaga, R. 2007. Critical role of the p400/mDomino chromatin-remodeling ATPase in embryonic hematopoiesis. Genes Cells 12: 581-592.

CHROMOSOMAL LOCATION

Genetic locus: Ep400 (mouse) mapping to 5 F.

SOURCE

p400 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of p400 of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66500 P, (100 μ g 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-66500 X, 200 μ g/0.1 ml.

APPLICATIONS

p400 (S-20) is recommended for detection of p400 of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for p400 siRNA (m): sc-62744.

p400 (S-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of p400: 350 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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