SANTA CRUZ BIOTECHNOLOGY, INC.

ANP32B (G-12): sc-68219

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ANP32B (acidic (leucine-rich) nuclear phosphoprotein 32 family, member B), also known as PHAPI2, SSP29 or APRIL, is a 251 amino acid protein that localizes to the nucleus and contains 4 LRR (leucine-rich repeat) motifs. Expressed in placenta, heart, pancreas, lung, prostate, spleen and thymus, ANP32B exists as a multifunctional protein that plays an essential role in cell cycle progression and cell survival and is required for the G_1 to S phase transition. Additionally, ANP32B functions as an anti-apoptotic factor that inhibits the activity of caspase-3, a protein that is crucial for the successful execution of apoptotic events. Two isoforms of ANP32B exist due to alternative splicing.

REFERENCES

1. Zhu, L., et al. 1997. Cloning and characterization of a new silver-stainable protein SSP29, a member of the LRR family. Biochem. Mol. Biol. Int. 42: 927-935.
2. Mencinger, M., et al. 1998. Expression analysis and chromosomal mapping of a novel human gene, APRIL, encoding an acidic protein rich in leucines. Biochim. Biophys. Acta 1395: 176-180.

CHROMOSOMAL LOCATION

Genetic locus: ANP32B (human) mapping to 9q22.33; Anp32b (mouse) mapping to 4 B1.

SOURCE

ANP32B (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANP32B 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-68219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANP32B (G-12) is recommended for detection of ANP32B of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ANP32B siRNA (h): sc-62796, ANP32B siRNA (m): sc-62797, ANP32B shRNA Plasmid (h): sc-62796-SH, ANP32B shRNA Plasmid (m): sc-62797-SH, ANP32B shRNA (h) Lentiviral Particles: sc-62796-V and ANP32B shRNA (m) Lentiviral Particles: sc-62797-V.

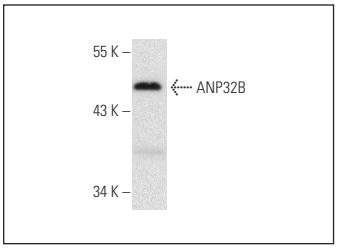
Molecular Weight of ANP32B: 29 kDa.

Positive Controls: ANP32B (m2): 293T Lysate: sc-125817 or PC-3 cell lysate: sc-2220.

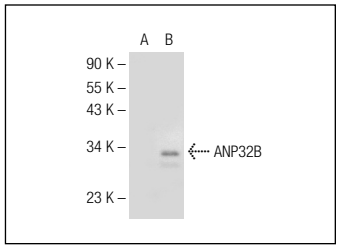
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ANP32B (G-12): sc-68219. Western blot analysis of ANP32B expression in PC-3 whole cell lysate.



ANP32B (G-12): sc-68219. Western blot analysis of ANP32B expression in non-transfected: sc-117752 (**A**) and mouse ANP32B transfected: sc-125817 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nalvarte, I., et al. 2010. Proteomics analysis of the estrogen receptor α receptosome. Mol. Cell. Proteomics 9: 1411-1422.

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.