

ANP32A/B (H-163): sc-292113

BACKGROUND

Protein phosphatase 2A (PP2A) is a major mammalian serine/threonine phosphatase that regulates diverse cellular processes. ANP32A, also known as Inhibitor 1 of PP2A (I1PP2A) is a heat-stable cytoplasmic and nuclear protein that functions as an inhibitor of cellular PP2A phosphatase activity. ANP32B (acidic (leucine-rich) nuclear phosphoprotein 32 family, member B), also designated 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 G₁ 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ANP32A (human) mapping to 15q23, ANP32B (human) mapping to 9q22.33; Anp32a (mouse) mapping to 9 B, Anp32b (mouse) mapping to 4 B1.

SOURCE

ANP32A/B (H-163) is a rabbit polyclonal antibody raised against amino acids 1-163 mapping at the N-terminus of ANP32B of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ANP32A/B (H-163) is recommended for detection of ANP32A and ANP32B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

ANP32A/B (H-163) is also recommended for detection of ANP32A and ANP32B in additional species, including bovine.

Molecular Weight of ANP32A/B: 29 kDa.

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.

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.


 MONOS
 Satisfation
 Guaranteed

Try **ANP32A/B (A-2): sc-374552**, our highly recommended monoclonal alternative to ANP32A/B (H-163).