SANTA CRUZ BIOTECHNOLOGY, INC.

Nucling (N-13): sc-135511

BACKGROUND

Nucling, also known as UACA (uveal autoantigen with coiled-coil domains and ankyrin repeats) and KIAA1561, is a 1,416 amino acid nuclear and cytoplasmic protein. Upregulated after TSH-stimulation, Nucling is a component of the apoptosome complex, whose other components include Apaf-1 and caspase-9. Nucling interacts directly with Apaf-1 and regulates it's redistribution to the nucleus following proapoptotic stress. Nucling also plays a role in the promotion of apoptosis by the galectin-3 downregulation, apoptosome upregulation and NFκB inactivation pathways. Nucling also interacts with ARF6, which may modulate cell shape and motility following injury. Nucling contains six ANK repeats and is expressed highly in kidney, heart, pancreas and skeletal muscle. Nucling is a potential target autoantigen in Behcet disease (BD), Vogt-Koyanagi-Harada (VKH) and sarcoidosis, which cause different types of panuevitis.

CHROMOSOMAL LOCATION

Genetic locus: UACA (human) mapping to 15q23; Uaca (mouse) mapping to 9 B.

SOURCE

Nucling (N-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Nucling of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-135511 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Nucling (N-13) is recommended for detection of Nucling of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Nucling (N-13) is also recommended for detection of Nucling in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Nucling siRNA (h): sc-90147, Nucling siRNA (m): sc-150095, Nucling shRNA Plasmid (h): sc-90147-SH, Nucling shRNA Plasmid (m): sc-150095-SH, Nucling shRNA (h) Lentiviral Particles: sc-90147-V and Nucling shRNA (m) Lentiviral Particles: sc-150095-V.

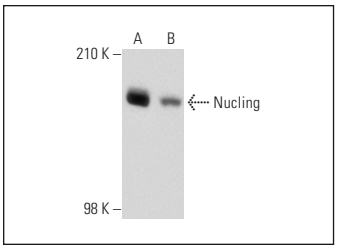
Molecular Weight of Nucling: 160 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MIA PaCa-2 cell lysate: sc-2285 or WI 38 whole cell lysate: sc-364260.

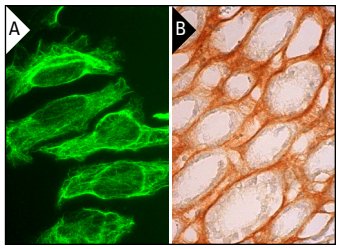
RECOMMENDED SECONDARY REAGENTS

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



Nucling (N-13): sc-135511. Western blot analysis of Nucling expression in HeLa (**A**) and MIA PaCa-2 (**B**) whole cell lysates.



Nucling (N-13): sc-135511. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing basolateral membrane staining of cells in tubules (**B**).

STORAGE

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

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **Nucling (A-5): sc-515005** or **Nucling (A-4): sc-514117**, our highly recommended monoclonal alternatives to Nucling (N-13).