

Nucling (E-12): sc-135510

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 its 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 NF κ B 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 panuveitis.

REFERENCES

1. Yamada, K., et al. 2001. Identification of a novel autoantigen UACA in patients with panuveitis. *Biochem. Biophys. Res. Commun.* 280: 1169-1176.
2. Ohkura, T., et al. 2004. Detection of the novel autoantibody (anti-UACA antibody) in patients with Graves' disease. *Biochem. Biophys. Res. Commun.* 321: 432-440.
3. Brandenberger, R., et al. 2004. Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation. *Nat. Biotechnol.* 22: 707-716.
4. Bouwmeester, T., et al. 2004. A physical and functional map of the human TNF- α /NF κ B signal transduction pathway. *Nat. Cell Biol.* 6: 97-105.
5. Beausoleil, S.A., et al. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.
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CHROMOSOMAL LOCATION

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

SOURCE

Nucling (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Nucling of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-135510 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Nucling (E-12) 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 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

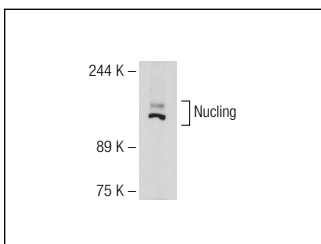
Suitable for use as control antibody for Nucling siRNA (h): sc-90147, Nucling siRNA (m): sc-150095, Nucling shRNA Plasmid (h): sc-90147-SH, Nucling shRNA Plasmid (m): sc-150095-SH, Nucling shRNA (h) Lentiviral Particles: sc-90147-V and Nucling shRNA (m) Lentiviral Particles: sc-150095-V.

Molecular Weight of Nucling: 160 kDa.

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.

DATA



Nucling (E-12): sc-135510. Western blot analysis of Nucling expression in WI-38 whole cell lysate.

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
Satisfaction
Guaranteed

Try **Nucling (A-5): sc-515005** or **Nucling (A-4): sc-514117**, our highly recommended monoclonal alternatives to Nucling (E-12).