

# VPS72 (N-14): sc-132137

## BACKGROUND

The mammalian TRRAP/TIP60-containing histone acetyltransferase (HAT) complex, which exists in *Drosophila melanogaster* and mammalian cells, is a complex that is responsible for various cellular processes, including DNA repair, transcriptional activation and apoptosis. Vacuolar protein sorting-associated protein 72 homolog (VPS72), also known as VPS72 or Transcription factor-like 1, is a 364 amino acid subunit of the TRRAP/TIP60 HAT complex. VPS72 has also been identified as a subunit of a novel complex containing SNF2-related helicase SRCAP (SWI2/SNF2-related CBP activator protein). This SRCAP-containing complex is very similar to the *S. cerevisiae* SWR1 chromatin remodeling complex. The involvement of VPS72 in these complexes has suggested that VPS72 plays multiple roles in chromatin modification and remodeling in cells. VPS72 localizes to the nucleus and is phosphorylated upon DNA damage, most likely by ATM or ATR.

## REFERENCES

1. Horikawa, I., et al. 1995. Molecular cloning of a novel human cDNA on chromosome 1q21 and its mouse homolog encoding a nuclear protein with DNA-binding ability. *Biochem. Biophys. Res. Commun.* 208: 999-1007.
2. Horikawa, I., et al. 1995. Forced expression of YL-1 protein suppresses the anchorage-independent growth of Kirsten sarcoma virus-transformed NIH/3T3 cells. *Exp. Cell Res.* 220: 11-17.
3. Park, J., et al. 2001. The ATM-related domain of TRRAP is required for histone acetyltransferase recruitment and Myc-dependent oncogenesis. *Genes Dev.* 15: 1619-1624.
4. Nikiforov, M.A., et al. 2002. TRRAP-dependent and TRRAP-independent transcriptional activation by Myc family oncoproteins. *Mol. Cell. Biol.* 22: 5054-5063.
5. Li, H., et al. 2004. HAT cofactor TRRAP regulates the mitotic checkpoint by modulation of Mad1 and Mad2 expression. *EMBO J.* 23: 4824-4834.

## CHROMOSOMAL LOCATION

Genetic locus: VPS72 (human) mapping to 1q21.2; *Vps72* (mouse) mapping to 3 F2.1.

## SOURCE

VPS72 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of VPS72 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-132137 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

VPS72 (N-14) is recommended for detection of VPS72 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); non cross-reactive with other VPS family members.

VPS72 (N-14) is also recommended for detection of VPS72 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VPS72 siRNA (h): sc-78694, VPS72 siRNA (m): sc-155224, VPS72 shRNA Plasmid (h): sc-78694-SH, VPS72 shRNA Plasmid (m): sc-155224-SH, VPS72 shRNA (h) Lentiviral Particles: sc-78694-V and VPS72 shRNA (m) Lentiviral Particles: sc-155224-V.

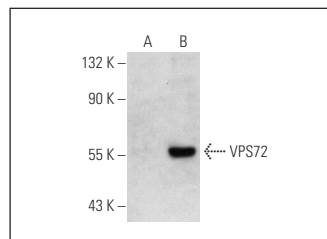
Molecular Weight of VPS72: 41 kDa.

Positive Controls: VPS72 (h): 293T Lysate: sc-175285.

## 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



VPS72 (N-14): sc-132137. Western blot analysis of VPS72 expression in non-transfected: sc-117752 (A) and human VPS72 transfected: sc-175285 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.