

# VPS72 (F-25): sc-102155

## 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

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- 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.
- Nikiforov, M.A., et al. 2002. TRRAP-dependent and TRRAP-independent transcriptional activation by Myc family oncoproteins. *Mol. Cell. Biol.* 22: 5054-5063.
- Li, H., et al. 2004. HAT cofactor TRRAP regulates the mitotic checkpoint by modulation of MAD1 and MAD2 expression. *EMBO J.* 23: 4824-4834.
- Cai, Y., et al. 2005. The mammalian YL1 protein is a shared subunit of the TRRAP/TIP60 histone acetyltransferase and SRCAP complexes. *J. Biol. Chem.* 280: 13665-13670.
- Matsuoka, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.

## CHROMOSOMAL LOCATION

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

## SOURCE

VPS72 (F-25) is a purified rabbit polyclonal antibody raised against VPS72 of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

VPS72 (F-25) is recommended for detection of VPS72 of mouse, rat, human and dog 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

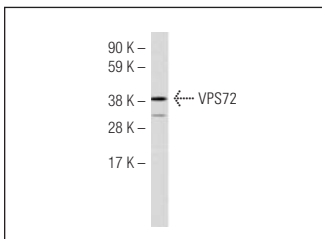
Molecular Weight of VPS72: 41 kDa.

Positive Controls: fetal muscle tissue extract or HeLa whole cell lysate: sc-2200.

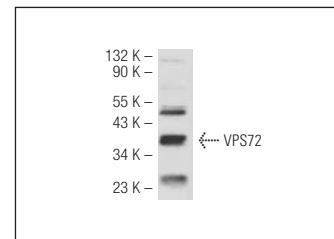
## RECOMMENDED SECONDARY REAGENTS

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).

## DATA



VPS72 (F-25): sc-102155. Western blot analysis of VPS72 expression in fetal muscle tissue extract.



VPS72 (F-25): sc-102155. Western blot analysis of VPS72 expression in HeLa whole cell lysate.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.