

HAUSP (m): 293T Lysate: sc-178723

BACKGROUND

HAUSP (herpesvirus-associated ubiquitin-specific protease, USP7) is a ubiquitin-specific protease. HAUSP localizes predominantly to the nucleus, in a TD-dependent manner, where it associates with ND10. ND10 are small nuclear structures implicated in a variety of cellular processes including response to stress and interferons, oncogenesis, and viral infection. HAUSP binds strongly to Vmw110, a herpesvirus regulatory protein which has the ability to disrupt ND10. HAUSP, a novel p53-interacting protein, functions to deubiquitinate p53 in an important pathway for p53 stabilization. HAUSP strongly stabilizes p53 even in the presence of excess Mdm2, and also induces p53-dependent cell growth repression and apoptosis. The HAUSP protein is distributed in the nucleus in a micropunctate pattern with a limited number of larger discrete foci, some of which co-localize with PML in ND10. The gene encoding HAUSP maps to human chromosome band 16p13.2.

REFERENCES

1. Everett, R.D., Freemont, P., Saitoh, H., Dasso, M., Orr, A., Kathoria, M. and Parkinson, J. 1998. The disruption of ND10 during herpes simplex virus infection correlates with the Vmw110- and proteasome-dependent loss of several PML isoforms. *J. Virol.* 72: 6581-6591.
2. Robinson, P.A., Lomonte, P., Leek, Markham, A.F. and Everett, R.D. 1998. Assignment 1 of herpesvirus-associated ubiquitin-specific protease gene HAUSP to human chromosome band 16p13.3 by *in situ* hybridization. *Cytogenet. Cell Genet.* 83: 100.
3. Everett, R.D., Meredith, M. and Orr, A. 1999. The ability of herpes simplex virus type 1 immediate-early protein Vmw110 to bind to a ubiquitin-specific protease contributes to its roles in the activation of gene expression and stimulation of virus replication. *J. Virol.* 73: 417-426.
4. Zapata, J.M., Pawlowski, K., Haas, E., Ware, C.F., Godzik, A. and Reed, J.C. 2001. A diverse family of proteins containing tumor necrosis factor receptor-associated factor domains. *J. Biol. Chem.* 276: 24242-24252.
5. Li, M., Chen, D., Shiloh, A., Luo, J., Nikolaev, A.Y., Qin, J. and Gu, W. 2002. Deubiquitination of p53 by HAUSP is an important pathway for p53 stabilization. *Nature* 416: 648-653.
6. Muratani, M., Gerlich, D., Janicki, S.M., Gebhard, M., Eils, R. and Spector, D.L. 2002. Metabolic-energy-dependent movement of PML bodies within the mammalian cell nucleus. *Nat. Cell Biol.* 4: 106-110.

CHROMOSOMAL LOCATION

Genetic locus: Usp7 (mouse) mapping to 16 A1.

PRODUCT

HAUSP (m): 293T Lysate represents a lysate of mouse HAUSP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

HAUSP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive HAUSP antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

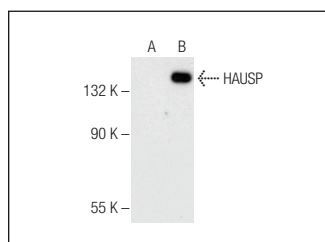
HAUSP (G-10): sc-376912 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse HAUSP expression in HAUSP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

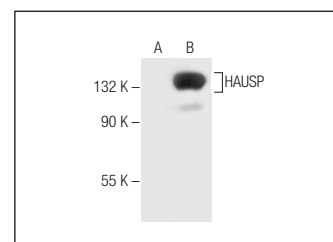
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



HAUSP (G-10): sc-376912. Western blot analysis of HAUSP expression in non-transfected: sc-117752 (A) and mouse HAUSP transfected: sc-178723 (B) 293T whole cell lysates.



HAUSP (G-12): sc-377147. Western blot analysis of HAUSP expression in non-transfected: sc-117752 (A) and mouse HAUSP transfected: sc-178723 (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 for detailed protocols and support products.