

HAUSP (C-2): sc-133204

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. Robinson, P.A., et al. 1998. Assignment1 of herpes virus-associated ubiquitin-specific protease gene HAUSP to human chromosome band 16p13.3 by *in situ* hybridization. *Cytogenet. Cell Genet.* 83: 100.
2. Everett, R.D., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: USP7 (human) mapping to 16p13.2; Usp7 (mouse) mapping to 16 A1.

SOURCE

HAUSP (C-2) is a mouse monoclonal antibody raised against amino acids 11-210 mapping near the N-terminus of HAUSP of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HAUSP (C-2) is recommended for detection of HAUSP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for HAUSP siRNA (h): sc-41521, HAUSP siRNA (m): sc-77373, HAUSP shRNA Plasmid (h): sc-41521-SH, HAUSP shRNA Plasmid (m): sc-77373-SH, HAUSP shRNA (h) Lentiviral Particles: sc-41521-V and HAUSP shRNA (m) Lentiviral Particles: sc-77373-V.

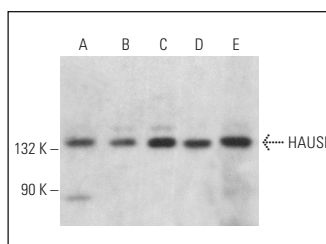
Molecular Weight of HAUSP: 135 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, ZR-75-1 cell lysate: sc-2241 or 3611-RF whole cell lysate: sc-2215.

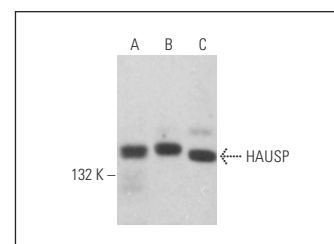
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HAUSP (C-2): sc-133204. Western blot analysis of HAUSP expression in HEL 92.1.7 (A), BYDP (B), WR19L (C) and PC-12 (D) whole cell lysates and rat lymph node tissue extract (E).



HAUSP (C-2): sc-133204. Western blot analysis of HAUSP expression in Jurkat (A), ZR-75-1 (B) and 3611-RF (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Cheray, M., et al. 2014. Specific inhibition of DNMT1/CFP1 reduces cancer phenotypes and enhances chemotherapy effectiveness. *Epigenomics* 6: 267-275.
2. Zhang, J., et al. 2014. ABR01 suppresses tumorigenesis and regulates the DNA damage response by stabilizing p53. *Nat. Commun.* 5: 5059.
3. Kapadia, B., et al. 2018. Fatty acid synthase induced S6Kinase facilitates USP11-eIF4B complex formation for sustained oncogenic translation in DLBCL. *Nat. Commun.* 9: 829.
4. Zhang, H., et al. 2019. Exosome circRNA secreted from adipocytes promotes the growth of hepatocellular carcinoma by targeting deubiquitination-related USP7. *Oncogene* 38: 2844-2859.
5. Li, F., et al. 2019. The deubiquitinase OTUD5 regulates Ku80 stability and non-homologous end joining. *Cell. Mol. Life Sci.* 76: 3861-3873.

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 for detailed protocols and support products.