

# HDAC11 (C-5): sc-390737

## BACKGROUND

Histone deacetylases (HDACs) play an important role in the modification of chromatin structure and thus in the suppression and activation of transcription and cellular differentiation. There are 11 members in the HDAC family that are classified into 4 classes. Class I HDACs represent homologs of the yeast histone deacetylase RPD3, class II HDACs share strong homology with the yeast histone deacetylase HDA1, class III HDAC are closely related to the yeast SIR2 protein, and class IV HDACs comprises histone deacetylase 11 (HDAC11)-related enzymes. HDAC11 contains 347 amino acid residues. HDAC11 contains conserved residues in the catalytic core regions shared by both class I and II mammalian HDAC enzymes. Expression of HDAC11 is high in the kidney, heart, brain, skeletal muscle, and testis, and it localizes to the cell nucleus. The human gene encoding for HDAC11 maps to chromosome 3p25.1.

## CHROMOSOMAL LOCATION

Genetic locus: HDAC11 (human) mapping to 3p25.1; Hdac11 (mouse) mapping to 6 D1.

## SOURCE

HDAC11 (C-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of HDAC11 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HDAC11 (C-5) is available conjugated to agarose (sc-390737 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390737 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390737 PE), fluorescein (sc-390737 FITC), Alexa Fluor® 488 (sc-390737 AF488), Alexa Fluor® 546 (sc-390737 AF546), Alexa Fluor® 594 (sc-390737 AF594) or Alexa Fluor® 647 (sc-390737 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390737 AF680) or Alexa Fluor® 790 (sc-390737 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

HDAC11 (C-5) is recommended for detection of HDAC11 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 HDAC11 siRNA (h): sc-106896, HDAC11 siRNA (m): sc-145909, HDAC11 siRNA (r): sc-156104, HDAC11 shRNA Plasmid (h): sc-106896-SH, HDAC11 shRNA Plasmid (m): sc-145909-SH, HDAC11 shRNA Plasmid (r): sc-156104-SH, HDAC11 shRNA (h) Lentiviral Particles: sc-106896-V, HDAC11 shRNA (m) Lentiviral Particles: sc-145909-V and HDAC11 shRNA (r) Lentiviral Particles: sc-156104-V.

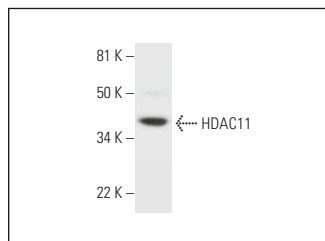
Molecular Weight of HDAC11: 39 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

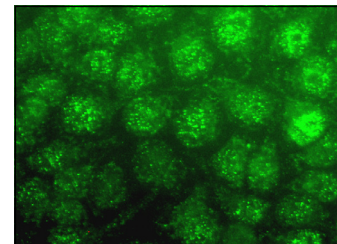
## STORAGE

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

## DATA



HDAC11 (C-5): sc-390737. Western blot analysis of HDAC11 expression in Caki-1 whole cell lysate.



HDAC11 (C-5): sc-390737. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization.

## SELECT PRODUCT CITATIONS

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- Wu, J., et al. 2020. lncRNA-CD160 decreases the immunity of CD8<sup>+</sup> T cells through epigenetic mechanisms in hepatitis B virus infection. *Oncol. Lett.* 20: 235-247.
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- Fan, Q., et al. 2021. A novel ZIP4-HDAC4-VEGFA axis in high-grade serous ovarian cancer. *Cancers* 13: 3821.
- Mostofa, A., et al. 2021. Plasma cell dependence on histone/protein deacetylase 11 reveals a therapeutic target in multiple myeloma. *JCI Insight* 6: e151713.
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- Wu, Z., et al. 2022. 11β-hydroxysteroid dehydrogenase 2: a key mediator of high susceptibility to osteoporosis in offspring after prenatal dexamethasone exposure. *Pharmacol. Res.* 175: 105990.

## RESEARCH USE

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

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