

# HDHD3 (C-1): sc-377141

## BACKGROUND

HDHD3 (haloacid dehalogenase-like hydrolase domain containing 3) is a 251 amino acid protein that belongs to the HAD-like hydrolase superfamily, which contains a group of hydrolase enzymes that differ from the  $\alpha/\beta$  hydrolase family based on structure. This family of hydrolase enzymes includes L-2-haloacid dehalogenase, epoxide hydrolases and phosphatases. HDHD3 is encoded by a gene located on human chromosome 9q32. Chromosome 9 consists of about 145 million bases, 4% of the human genome and encodes nearly 900 genes. Thought to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype.

## REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
2. Coppo, P., et al. 2006. Bcr-Abl activates Stat3 via JAK and MEK pathways in human cells. *Br. J. Haematol.* 134: 171-179.
3. Zheng, X., et al. 2006. BCR and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 7: 262.
4. Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
5. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). *Respiration* 74: 361-378.

## CHROMOSOMAL LOCATION

Genetic locus: HDHD3 (human) mapping to 9q32; Hdhd3 (mouse) mapping to 4 B3.

## SOURCE

HDHD3 (C-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 31-69 within an internal region of HDHD3 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $\gamma_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HDHD3 (C-1) is available conjugated to agarose (sc-377141 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377141 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377141 PE), fluorescein (sc-377141 FITC), Alexa Fluor<sup>®</sup> 488 (sc-377141 AF488), Alexa Fluor<sup>®</sup> 546 (sc-377141 AF546), Alexa Fluor<sup>®</sup> 594 (sc-377141 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-377141 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-377141 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-377141 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377141 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

HDHD3 (C-1) is recommended for detection of HDHD3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 HDHD3 siRNA (h): sc-92556, HDHD3 siRNA (m): sc-145915, HDHD3 shRNA Plasmid (h): sc-92556-SH, HDHD3 shRNA Plasmid (m): sc-145915-SH, HDHD3 shRNA (h) Lentiviral Particles: sc-92556-V and HDHD3 shRNA (m) Lentiviral Particles: sc-145915-V.

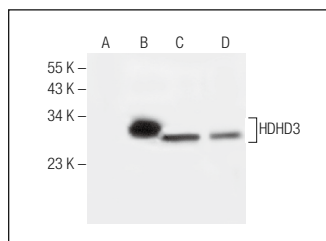
Molecular Weight of HDHD3: 28 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, HDHD3 (m): 293T Lysate: sc-125436 or MCF7 whole cell lysate: sc-2206.

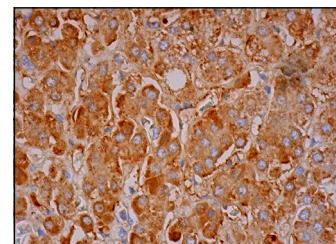
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



HDHD3 (C-1): sc-377141. Western blot analysis of HDHD3 expression in non-transfected 293T: sc-117752 (A), mouse HDHD3 transfected 293T: sc-125436 (B), MCF7 (C) and LNCaP (D) whole cell lysates.



HDHD3 (C-1): sc-377141. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

## 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.

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