

dHAND (H-110): sc-22818

BACKGROUND

dHAND (for deciduum, heart, autonomic nervous system and neural crest derivatives; also designated HAND2) and eHAND (also designated HAND1, HXT or Thing1) are members of a subclass of basic-helix-loop-helix transcription factors that are involved in cardiac development. dHAND and eHAND are expressed in the heart after cardiac looping and participate in left-right cardiac asymmetry. dHAND is expressed predominantly on the right side of the looped heart tube and in the pulmonary ventricle, where it activates transcription of various genes, including Ufd1 (for ubiquitin fusion degradation) and Cdc45. In addition, dHAND is expressed in sympathetic neurons and chromaffin cells throughout embryonic and fetal development, and mediates neural crest development. eHAND expression is primarily observed on the left side and in the systemic ventricle, suggesting that these proteins are involved in the development of segments of the heart tube, which give rise to specific heart chambers during cardiogenesis.

CHROMOSOMAL LOCATION

Genetic locus: HAND2 (human) mapping to 4q33; Hand2 (mouse) mapping to 8 B2.

SOURCE

dHAND (H-110) is a rabbit polyclonal antibody raised against amino acids 1-110 of dHAND of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

dHAND (H-110) is recommended for detection of dHAND of mouse, rat and human 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)], 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 dHAND siRNA (h): sc-37920, dHAND siRNA (m): sc-37921, dHAND shRNA Plasmid (h): sc-37920-SH, dHAND shRNA Plasmid (m): sc-37921-SH, dHAND shRNA (h) Lentiviral Particles: sc-37920-V and dHAND shRNA (m) Lentiviral Particles: sc-37921-V.

dHAND (H-110) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

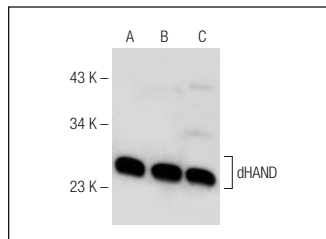
Molecular Weight of dHAND: 27 kDa.

Positive Controls: human platelet extract: sc-363773, human ovary extract: sc-363769 or human heart extract: sc-363763.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



dHAND (H-110): sc-22818. Western blot analysis of dHAND expression in human ovary (A), human placenta (B) and human heart (C) tissue extracts.

SELECT PRODUCT CITATIONS

1. Reiff, T., et al. 2010. Neuroblastoma phox2b variants stimulate proliferation and dedifferentiation of immature sympathetic neurons. *J. Neurosci.* 30: 905-915.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **dHAND (A-12): sc-398167** or **dHAND (HAND2C1a): sc-130629**, our highly recommended monoclonal alternatives to dHAND (H-110).