

## **HAND2 Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6117a

## **Specification**

## HAND2 Antibody (C-term) - Product Information

Application WB, IHC-P,E Primary Accession P61296

Other Accession P61295, Q61039, P57102, NP 068808

Reactivity Human

Predicted Zebrafish, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 179-207

## HAND2 Antibody (C-term) - Additional Information

#### **Gene ID 9464**

#### **Other Names**

Heart- and neural crest derivatives-expressed protein 2, Class A basic helix-loop-helix protein 26, bHLHa26, Deciduum, heart, autonomic nervous system and neural crest derivatives-expressed protein 2, dHAND, HAND2, BHLHA26, DHAND

## Target/Specificity

This HAND2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 179-207 amino acids from the C-terminal region of human HAND2.

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

HAND2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## HAND2 Antibody (C-term) - Protein Information

## Name HAND2





Synonyms BHLHA26, DHAND

**Function** Essential for cardiac morphogenesis, particularly for the formation of the right ventricle and of the aortic arch arteries. Required for vascular development and regulation of angiogenesis, possibly through a VEGF signaling pathway. Also plays an important role in limb development, particularly in the establishment of anterior- posterior polarization, acting as an upstream regulator of sonic hedgehog (SHH) induction in the limb bud. Is involved in the development of branchial arches, which give rise to unique structures in the head and neck. Binds DNA on E-box consensus sequence 5'-CANNTG- 3' (By similarity).

**Cellular Location** 

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

**Tissue Location** 

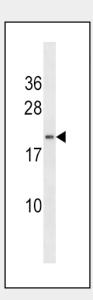
Heart.

## **HAND2 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

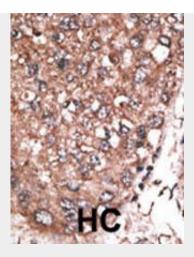
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **HAND2 Antibody (C-term) - Images**



Western blot analysis of anti-HAND2 Antibody (C-term) (Cat.#AP6117a) in NCI-H460 cell line lysates (35ug/lane). HAND2(arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# HAND2 Antibody (C-term) - Background

HAND2 belongs to the basic helix-loop-helix family of transcription factors. This gene product is one of two closely related family members, the HAND proteins, which are asymmetrically expressed in the developing ventricular chambers and play an essential role in cardiac morphogenesis. Working in a complementary fashion, they function in the formation of the right ventricle and aortic arch arteries, implicating them as mediators of congenital heart disease. In addition, this transcription factor plays an important role in limb and branchial arch development.

# **HAND2 Antibody (C-term) - References**

McFadden, D.G., et al., Development 127(24):5331-5341 (2000). Firulli, A.B., et al., Nat. Genet. 18(3):266-270 (1998). Russell, M.W., et al., Biochim. Biophys. Acta 1443(3):393-399 (1998). Srivastava, D., Trends Cardiovasc Med 9 (1-2), 11-18 (1999). Srivastava, D., et al., Cold Spring Harb. Symp. Quant. Biol. 67, 121-125 (2002).