

## HAND2 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6117a

#### **Specification**

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

Primary Accession P61296
Other Accession NP 068808

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

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP6117a>AP6117a</a> was selected from the C-term region of human HAND2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

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

#### • Blocking Peptides

HAND2 Antibody (C-term) Blocking Peptide - Images

# HAND2 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).