

HAND1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14407c**Specification**

HAND1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O96004](#)**HAND1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 9421**Other Names**

Heart- and neural crest derivatives-expressed protein 1, Class A basic helix-loop-helix protein 27, bHLHa27, Extraembryonic tissues, heart, autonomic nervous system and neural crest derivatives-expressed protein 1, eHAND, HAND1, BHLHA27, EHAND

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.

HAND1 Antibody (Center) Blocking Peptide - Protein Information**Name** HAND1**Synonyms** BHLHA27, EHAND**Function**

Transcription factor that plays an essential role in both trophoblast giant cell differentiation and in cardiac morphogenesis (By similarity). Binds the DNA sequence 5'-NRTCTG-3' (non-canonical E-box) (By similarity). Acts as a transcriptional repressor of SOX15 (By similarity). In the adult, could be required for ongoing expression of cardiac-specific genes (PubMed:9931445).

Cellular Location

Nucleus, nucleoplasm. Nucleus, nucleolus. Note=Interaction with MDFIC sequesters it into the nucleolus, preventing the transcription factor activity Phosphorylation by PLK4 disrupts the interaction with MDFIC and releases it from the nucleolus, leading to transcription factor activity (By similarity).

Tissue Location

Heart.

HAND1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

HAND1 Antibody (Center) Blocking Peptide - Images

HAND1 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene 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, it has been suggested that this transcription factor may be required for early trophoblast differentiation.

HAND1 Antibody (Center) Blocking Peptide - References

Reamon-Buettner, S.M., et al. Hum. Mol. Genet. 18(19):3567-3578(2009) Martinez Hoyos, J., et al. Oncogene 28(6):876-885(2009) Reamon-Buettner, S.M., et al. Hum. Mol. Genet. 17(10):1397-1405(2008) Morin, S., et al. J. Biol. Chem. 280(37):32272-32278(2005) Hill, A.A., et al. Mol. Cell. Biol. 24(22):9835-9847(2004)