

# HAND2 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant HAND2. Catalog # AT2314a

#### **Product Information**

Application WB, IF
Primary Accession P61296
Other Accession NM\_021973
Reactivity Human
Host mouse
Clonality monoclonal
Isotype IgG2b Kappa

Clone Names 4D9 Calculated MW 23666

### **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** HAND2 (NP\_068808.1, 135 a.a. ~ 216 a.a) partial recombinant protein with

GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 IF~~1:50~200

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2.

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** HAND2 Antibody (monoclonal) (M05) is for research use only and not for use

in diagnostic or therapeutic procedures.

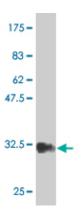
## **Background**

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, this transcription factor plays an important role in limb and branchial arch development.

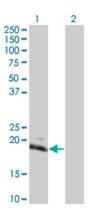
### References

Transcription factor HAND2 mutations in sporadic Chinese patients with congenital heart disease. Shen L, et al. Chin Med J (Engl), 2010 Jul. PMID 20819618.Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.Co-regulated expression of HAND2 and DEIN by a bidirectional promoter with asymmetrical activity in neuroblastoma. Voth H, et al. BMC Mol Biol, 2009 Apr 6. PMID 19348682.Cardiac neural crest expression of Hand2 regulates outflow and second heart field development. Morikawa Y, et al. Circ Res, 2008 Dec 5. PMID 19008477.Hand, an evolutionarily conserved bHLH transcription factor required for Drosophila cardiogenesis and hematopoiesis. Han Z, et al. Development, 2006 Mar. PMID 16467358.

### **Images**



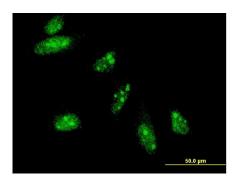
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (34.76 KDa).



Western Blot analysis of HAND2 expression in transfected 293T cell line by HAND2 monoclonal antibody (M05), clone 4D9.

Lane 1: HAND2 transfected lysate(21.6 KDa).

Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to HAND2 on HeLa cell . [antibody concentration 10 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.