

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.

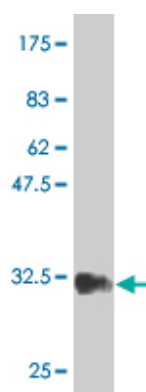
Background

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.

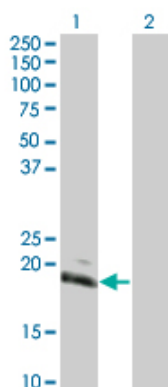
References

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

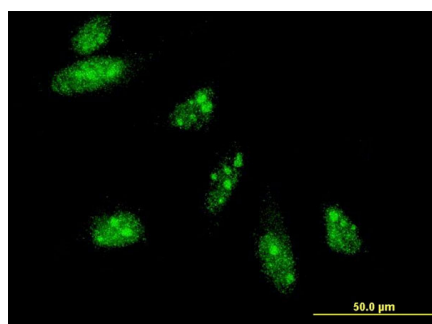


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (34.76 KDa) .



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'.