ARG66474
anti-HAND1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HAND1
Tested Reactivity	Hu, Rat
Predict Reactivity	Bov, Pig, Rb, Sheep
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HAND1
Species	Human
Immunogen	KLH-conjugated synthetic peptide within the C-terminal region of Human HAND1.
Conjugation	Un-conjugated
Alternate Names	Class A basic helix-loop-helix protein 27; Thing1; bHLHa27; eHAND; Hxt; eHand; Extraembryonic tissues, heart, autonomic nervous system and neural crest derivatives-expressed protein 1; Heart- and neural crest derivatives-expressed protein 1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:500
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 25 kDa

Properties

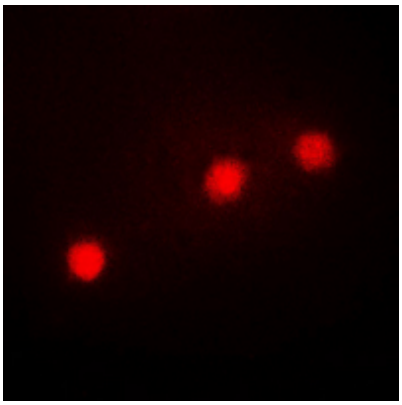
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.42% Potassium phosphate (pH 7.3), 0.87% NaCl, 0.01% Sodium azide and 30% Glycerol.
Preservative	0.01% Sodium azide
Stabilizer	30% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

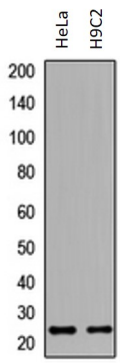
Gene Symbol	HAND1
Gene Full Name	heart and neural crest derivatives expressed 1
Background	The protein encoded by this gene belongs to the basic helix-loop-helix family of transcription factors. This gene product is one of two closely related family members, the HAND proteins, which are asymmetrically 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. [provided by RefSeq, Jul 2008]
Function	Transcription factor that plays an essential role in both trophoblast-giant cells differentiation and in cardiac morphogenesis. In the adult, could be required for ongoing expression of cardiac-specific genes. Binds the DNA sequence 5'-NRTCTG-3' (non-canonical E-box) (By similarity). [UniProt]
Calculated Mw	24 kDa
PTM	Phosphorylation by PLK4 disrupts the interaction with MDFIC and leads to tranlocation into the nucleoplasm, allowing dimerization and transcription factor activity. [UniProt]
Cellular Localization	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). [UniProt]

Images



ARG66474 anti-HAND1 antibody ICC/IF image

Immunofluorescence: Formalin-fixed HeLa cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at RT. Cells were stained with ARG66474 anti-HAND1 antibody in 3% BSA-PBS and incubated overnight at 4°C in a hidified chamber.



ARG66474 anti-HAND1 antibody WB image

Western blot: HeLa and H9C2 whole cell lysates stained with ARG66474 anti-HAND1 antibody.