



# HAND1 (phospho Ser98) Polyclonal Antibody

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| <b>Catalog No</b>         | YP-Ab-01406                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>         | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>       | IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Name</b>          | HAND1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Protein Name</b>       | Heart- and neural crest derivatives-expressed protein 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human HAND1 around the phosphorylation site of Ser98. AA range:71-120                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>        | Phospho-HAND1 (S98) Polyclonal Antibody detects endogenous levels of HAND1 protein only when phosphorylated at S98.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dilution</b>           | IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>           | HAND1; BHLHA27; EHAND; 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; eH                                                                                                                                                                                                                                                                                                                    |
| <b>Observed Band</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cell Pathway</b>       | Nucleus, nucleoplasm . Nucleus, nucleolus . 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). .                                                                                                                                                                                                                                                      |
| <b>Tissue Specificity</b> | Heart.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>           | function:Plays an essential role in early trophoblast 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).,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subunit:Efficient DNA binding requires dimerization with another bHLH protein. Forms homodimers and heterodimers with TCF3 gene products E12 and E47, HAND2 and HEY1, HEY2 and HEYL (hairly-related transcription factors).,tissue specificity:Heart., |



## 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],

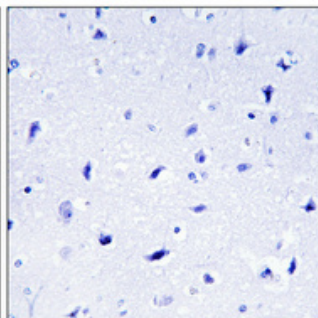
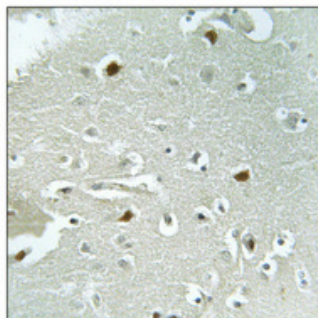
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.