

#### **HEY1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56291

### **Specification**

# **HEY1** Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession Q9Y5J3

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Dog, Bovine
Rabbit
Polyclonal
34 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human HEY1

Epitope Specificity 51-150/304

Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus.

SIMILARITY Belongs to the HEY family. Contains 1 basic

helix-loop-helix (bHLH) domain. Contains 1

Orange domain.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

#### **Background Descriptions**

This gene encodes a nuclear protein belonging to the hairy and enhancer of split-related (HESR) family of basic helix-loop-helix (bHLH)-type transcriptional repressors. Expression of this gene is induced by the Notch and c-Jun signal transduction pathways. Two similar and redundant genes in mouse are required for embryonic cardiovascular development, and are also implicated in neurogenesis and somitogenesis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2008]

## **HEY1 Polyclonal Antibody - Additional Information**

#### Gene ID 23462

## **Other Names**

Hairy/enhancer-of-split related with YRPW motif protein 1, Cardiovascular helix-loop-helix factor 2, CHF-2, Class B basic helix-loop-helix protein 31, bHLHb31, HES-related repressor protein 1, Hairy and enhancer of split-related protein 1, HESR-1, Hairy-related transcription factor 1, HRT-1, hHRT1, HEY1, BHLHB31, CHF2, HERP2, HESR1, HRT1

## **Target/Specificity**

Expressed in the somitic mesoderm, the central nervous system, the kidney, the heart, nasal



epithelium, and limbs.

#### **Dilution**

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class
="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_ICC">ICC~~N/A</span>

#### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

# **HEY1 Polyclonal Antibody - Protein Information**

### Name HEY1

Synonyms BHLHB31, CHF2, HERP2, HESR1, HRT1

#### **Function**

Transcriptional repressor which binds preferentially to the canonical E box sequence 5'-CACGTG-3' (PubMed:<a href="http://www.uniprot.org/citations/11095750" target="\_blank">11095750</a>). Downstream effector of Notch signaling required for cardiovascular development. Specifically required for the Notch-induced endocardial epithelial to mesenchymal transition, which is itself criticial for cardiac valve and septum development. May be required in conjunction with HEY2 to specify arterial cell fate or identity. Promotes maintenance of neuronal precursor cells and glial versus neuronal fate specification. Represses transcription by the cardiac transcriptional activators GATA4 and GATA6 and by the neuronal bHLH factors ASCL1/MASH1 and NEUROD4/MATH3 (PubMed:<a href="http://www.uniprot.org/citations/15485867" target="\_blank">15485867</a>). Involved in the regulation of liver cancer cells self-renewal (PubMed:<a href="http://www.uniprot.org/citations/25985737" target="\_blank">25985737</a>).

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00380, ECO:0000255|PROSITE-ProRule:PRU00981, ECO:0000269|PubMed:26068074}

#### **Tissue Location**

Expressed in the somitic mesoderm, the central nervous system, the kidney, the heart, nasal epithelium, and limbs

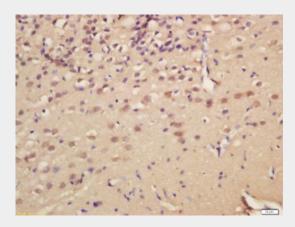
#### **HEY1 Polyclonal Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **HEY1 Polyclonal Antibody - Images**





Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-HEY1 Polyclonal Antibody, Unconjugated(bs-16500R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining