

HEY1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56291

Specification

HEY1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype	WB, IHC-P, IHC-F, IF, ICC, E <u>O9Y5J3</u> Rat, Dog, Bovine Rabbit Polyclonal 34 KDa Liquid KLH conjugated synthetic peptide derived from human HEY1 51-150/304 IgG
Purity affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION SIMILARITY	Nucleus. Belongs to the HEY family. Contains 1 basic
Important Note	helix-loop-helix (bHLH) domain. Contains 1 Orange domain. 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

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A<br \>ICC~~N/A<br \>E~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \><span class = "dilution_E"<br \><span class = "dil

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °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 °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:11095750). 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:15485867). Involved in the regulation of liver cancer cells self-renewal (PubMed:25985737).

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

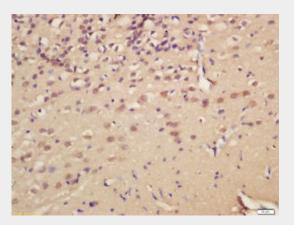
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



<u>Flow Cytomety</u>
<u>Cell Culture</u>

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