

HEY1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56291

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9Y5J3
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32613
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HEY1
Epitope Specificity	51-150/304
Isotype	IgG
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]

Additional Information

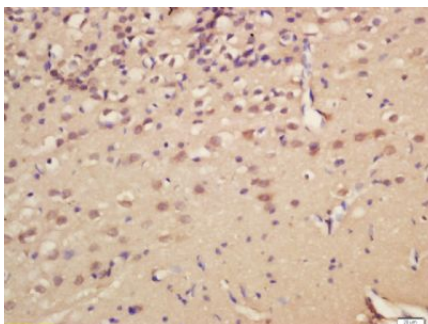
Gene ID	23462
Other Names	Hairy/enhancer-of-split related with YRPW motif protein 1, Cardiovascular helix-loop-helix factor 2, CHF-2, Class B basic helix-loop-helix protein 31, bHLHb31, HES-related repressor protein 1, Hairy and enhancer of split-related protein 1, HESR-1, Hairy-related transcription 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=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
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.

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 critical 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

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(AP56291) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.