

ARG41307 anti-BHLHB2 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes BHLHB2
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog, Gpig, Hrs, Rb, Sheep
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	BHLHB2
Species	Human
Immunogen	Synthetic peptide around the middle region of Human BHLHB2. (within the following region: SEKGDLRSEQPCFKSDHGRRFTMGERIGAIAKQSEEPPTKKNRMQLSDDE)
Conjugation	Un-conjugated
Alternate Names	Enhancer-of-split and hairy-related protein 2; bHLHb2; Differentially expressed in chondrocytes protein 1; bHLHe40; HLHB2; Class B basic helix-loop-helix protein 2; BHLHB2; Class E basic helix-loop-helix protein 40; Stra14; STRA13; Stimulated by retinoic acid gene 13 protein; DEC1; SHARP-2

Application Instructions

Predict Reactivity Note	Predicted Homology Based On Immunogen Sequence: Cow: 92%; Dog: 93%; Guinea pig: 100%; Horse: 100%; Mouse: 100%; Rabbit: 86%; Rat: 100%; Sheep: 92%						
Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>IHC-P</td><td>4 - 8 µg/ml</td></tr> <tr> <td>WB</td><td>1 µg/ml</td></tr> </table>	Application	Dilution	IHC-P	4 - 8 µg/ml	WB	1 µg/ml
Application	Dilution						
IHC-P	4 - 8 µg/ml						
WB	1 µg/ml						
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.						
Positive Control	Human fetal lung						

Properties

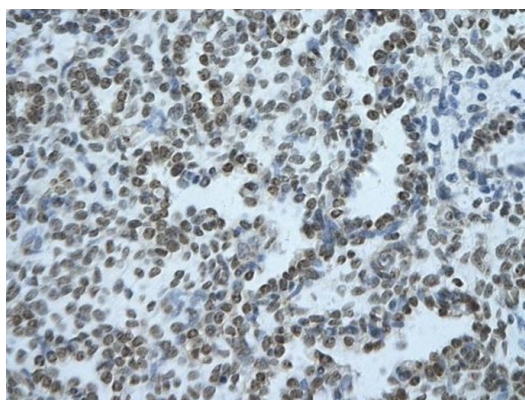
Form	Liquid
Purification	Affinity purified.
Buffer	PBS, 0.09% (w/v) Sodium azide and 2% Sucrose.
Preservative	0.09% (w/v) Sodium azide
Stabilizer	2% Sucrose

Concentration	Batch dependent: 0.5 - 1 mg/ml
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 or below. 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	BHLHE40
Gene Full Name	basic helix-loop-helix family, member e40
Background	This gene encodes a basic helix-loop-helix protein expressed in various tissues. The encoded protein can interact with ARNTL or compete for E-box binding sites in the promoter of PER1 and repress CLOCK/ARNTL's transactivation of PER1. This gene is believed to be involved in the control of circadian rhythm and cell differentiation. [provided by RefSeq, Feb 2014]
Function	Transcriptional repressor involved in the regulation of the circadian rhythm by negatively regulating the activity of the clock genes and clock-controlled genes. Acts as the negative limb of a novel autoregulatory feedback loop (DEC loop) which differs from the one formed by the PER and CRY transcriptional repressors (PER/CRY loop). Both these loops are interlocked as it represses the expression of PER1/2 and in turn is repressed by PER1/2 and CRY1/2. Represses the activity of the circadian transcriptional activator: CLOCK-ARNTL/BMAL1 ARNTL2/BMAL2 heterodimer by competing for the binding to E-box elements (5'-CACGTG-3') found within the promoters of its target genes. Negatively regulates its own expression and the expression of DBP and BHLHE41/DEC2. Acts as a corepressor of RXR and the RXR-LXR heterodimers and represses the ligand-induced RXRA and NR1H3/LXRA transactivation activity. May be involved in the regulation of chondrocyte differentiation via the cAMP pathway. [UniProt]
Calculated Mw	46 kDa
PTM	Ubiquitinated; which may lead to proteasomal degradation. Sumoylation inhibits its ubiquitination and promotes its negative regulation of the CLOCK-ARNTL/BMAL1 heterodimer transcriptional activator activity. [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Note=Predominantly localized in the nucleus (PubMed:11278694). [UniProt]

Images



ARG41307 anti-BHLHB2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human alveolar tissue (epithelial cells of renal tubule) stained with ARG41307 anti-BHLHB2 antibody at 4 - 8 µg/ml dilution.

ARG41307 anti-BHLHB2 antibody WB image

Western blot: Human fetal lung lysate stained with ARG41307 anti-BHLHB2 antibody at 1 µg/ml dilution.

