

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50)
Rabbit Polyclonal Antibody
Catalog # ALS15763

Specification

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Product Information

Application	IHC, WB
Primary Accession	Q9C0J9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50kDa KDa

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Additional Information

Gene ID 79365

Other Names

Class E basic helix-loop-helix protein 41, bHLHe41, Class B basic helix-loop-helix protein 3, bHLHB3, Differentially expressed in chondrocytes protein 2, hDEC2, Enhancer-of-split and hairy-related protein 1, SHARP-1, BHLHE41, BHLHB3, DEC2, SHARP1

Target/Specificity

BHLHB3 Antibody detects endogenous levels of total BHLHB3 protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) is for research use only and not for use in diagnostic or therapeutic procedures.

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Protein Information

Name BHLHE41 ([HGNC:16617](#))

Function

Transcriptional repressor involved in the regulation of the circadian rhythm by negatively regulating the activity of the clock genes and clock-controlled genes (PubMed:<a href="<http://www.uniprot.org/citations/11278948>">11278948, PubMed:<a href="<http://www.uniprot.org/citations/14672706>">14672706, PubMed:<a href="<http://www.uniprot.org/citations/15193144>">15193144, PubMed:<a href="<http://www.uniprot.org/citations/15560782>">15560782, PubMed:<a href="<http://www.uniprot.org/citations/18411297>">18411297, PubMed:<a href="<http://www.uniprot.org/citations/19786558>">19786558, PubMed:<a href="<http://www.uniprot.org/citations/25083013>">25083013). 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 and in turn is repressed by PER1/2 and CRY1/2. Represses the activity of the circadian transcriptional activator: CLOCK-BMAL1 heterodimer by competing for the binding to E-box elements (5'-CACGTG-3') found within the promoters of its target genes (PubMed:25083013). 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/B/G, NR1H3/LXRA, NR1H4 and VDR transactivation activity. Inhibits HNF1A-mediated transactivation of CYP1A2, CYP2E1 AND CYP3A11 (By similarity).

Cellular Location

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

Tissue Location

Highly expressed in skeletal muscle and brain, moderately expressed in pancreas and heart, weakly expressed in placenta, lung, liver and kidney

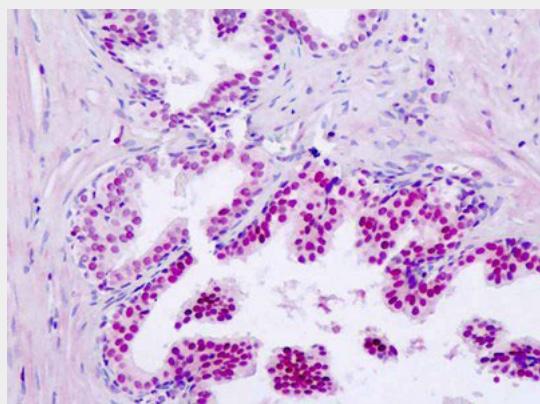
Volume

50 µl

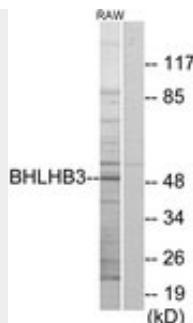
BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Images

Human, Prostate: Formalin-Fixed Paraffin-Embedded (FFPE)



Western blot of extracts from RAW264.7 cells, using BHLHB3 Antibody.

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - Background

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/CYR loop). Both these loops are interlocked as it represses the expression of PER1 and in turn is repressed by PER1/2 and CRY1/2. Represses the activity of the circadian transcriptional activator: CLOCK-ARNTL/BMAL1 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/B/G, NR1H3/LXRA, NR1H4 and VDR transactivation activity.

BHLHE41 / BHLHB3 / SHARP1 Antibody (aa1-50) - References

- Fujimoto K., et al. Biochem. Biophys. Res. Commun. 280:164-171(2001).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Garriga-Canut M., et al. J. Biol. Chem. 276:14821-14828(2001).
Kawamoto T., et al. Biochem. Biophys. Res. Commun. 313:117-124(2004).
Li Y., et al. Biochem. J. 382:895-904(2004).