

**BHLH3 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP5748a****Specification**

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**BHLH3 Antibody (N-term) Blocking peptide - Product Information**

Primary Accession [O9C0J9](#)  
Other Accession [NP\\_110389](#)

**BHLH3 Antibody (N-term) Blocking peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**BHLH3 Antibody (N-term) Blocking peptide - 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: [11278948](http://www.uniprot.org/citations/11278948), PubMed: [14672706](http://www.uniprot.org/citations/14672706), PubMed: [15193144](http://www.uniprot.org/citations/15193144), PubMed: [15560782](http://www.uniprot.org/citations/15560782), PubMed: [18411297](http://www.uniprot.org/citations/18411297), PubMed: [19786558](http://www.uniprot.org/citations/19786558), PubMed: [25083013](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25083013))

target="\_blank">25083013</a>). 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

**BHLH3 Antibody (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**BHLH3 Antibody (N-term) Blocking peptide - Images****BHLH3 Antibody (N-term) Blocking peptide - Background**

BHLHE41 may be a transcriptional repressor that represses both basal and activated transcription.

**BHLH3 Antibody (N-term) Blocking peptide - References**

Honma, S., et al. Nature 419(6909):841-844(2002) Garriga-Canut, M., et al. J. Biol. Chem. 276(18):14821-14828(2001) Fujimoto, K., et al. Biochem. Biophys. Res. Commun. 280(1):164-171(2001) Grottke, C., et al. Int. J. Cancer 88(4):535-546(2000)