Datasheet for ABIN7562280

# BHLHE40 Protein (AA 1-411) (His tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | BHLHE40 |
| Protein Characteristics: | AA 1-411 |
| Origin: | Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This BHLHE40 protein is labelled with His tag. |
| Application: | SDS-PAGE (SDS), Western Blotting (WB) |

## Product Details

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| Purpose: | Custom-made recombinat Bhlhe40 Protein expressed in mammalien cells. |
| Sequence: | MERIPSAQPP PTCLPKAPGL EHGDLSGMDF AHMYQVYKSR RGIKRSEDSK ETYKLPHRLI EKKRRDRINE CIAQLKDLLP EHLKLTTLGH LEKAVVLELT LKHVKALTNL IDQQQQKIIA LQSGLQAGDL SGRNLEAGQE MFCSGFQTCA REVLQYLAKH ENTRDLKSSQ LVTHLHRVVS ELLQGGASRK PLDSAPKAVD LKEKPSFLAK GSEGPGKNCV PVIQRTFAPS GGEQSGSDTD TDSGYGGELE KGDLRSEQPY FKSDHGRRFA VGERVSTIKQ ESEEPPTKKS RMQLSEEEGH FAGSDLMGSP FLGPHPHQPP FCLPFYLIPP SATAYLPMLE KCWYPTSVPV LYPGLNTSAA ALSSFMNPDK IPTPLLLPQR LPSPLAHSSL DSSALLQALK QIPPLNLETK D **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.** |
| Characteristics: | Key Benefits: |

## Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

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| Purity: | > 90 % as determined by Bis-Tris Page, Western Blot |
| Grade: | custom-made |

## Target Details

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| Target: | BHLHE40 |
| Alternative Name: | Bhlhe40 (BHLHE40 Products) |
| Background: | Class E basic helix-loop-helix protein 40 (bHLHe40) (Class B basic helix-loop-helix protein 2) (bHLHb2) (Differentially expressed in chondrocytes protein 1) (DEC1) (E47 interaction protein 1) (EIP1) (Stimulated by retinoic acid gene 13 protein),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:18411297). 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) (PubMed:14672706). Both these loops are interlocked as it represses the expression of PER1/2 and in turn is repressed by PER1/2 and CRY1/2 (By similarity). Represses the activity of the circadian transcriptional activator: CLOCK-BMAL1\|BMAL2 heterodimer by competing for the binding to E-box elements (5'-CACGTG-3') found within the promoters of its target genes (By similarity). Negatively regulates its own expression and the expression of DBP and BHLHE41/DEC2 (PubMed:14672706). Acts as a corepressor of RXR and the RXR-LXR heterodimers and represses the ligand-induced RXRA and NR1H3/LXRA transactivation activity (PubMed:19786558). May function as a transcriptional |

## Target Details

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| | factor for neuronal differentiation (PubMed:9284045). Represses the transcription of NR0B2 and attentuates the transactivation of NR0B2 by the CLOCK-BMAL1 complex (By similarity). Drives the circadian rhythm of blood pressure through transcriptional repression of ATP1B1 in the cardiovascular system (PubMed:30012868). {ECO:0000250\|UniProtKB:O14503, ECO:0000269\|PubMed:14672706, ECO:0000269\|PubMed:18411297, ECO:0000269\|PubMed:19786558, ECO:0000269\|PubMed:30012868, ECO:0000269\|PubMed:9284045}. |
| Molecular Weight: | 45.4 kDa |
| UniProt: | O35185 |
| Pathways: | Photoperiodism |

## Application Details

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| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |

 