

## **Anti-DEC2** antibody



**Description** Rabbit polyclonal to DEC2.

Model STJ92684

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC, WB

**Immunogen** Synthesized peptide derived from human 40879

Immunogen Region 10-90 aa, N-terminal

**Gene ID** <u>79365</u>

Gene Symbol BHLHE41

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000

**Specificity** DEC2 Polyclonal Antibody detects endogenous levels of 40879 protein.

**Tissue Specificity** Highly expressed in skeletal muscle and brain, moderately expressed in

pancreas and heart, weakly expressed in placenta, lung, liver and kidney.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name 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

Molecular Weight 50 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:166170MIM:606200

Alternative 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

**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 and in turn is repressed by PER1/2 and CRY1/2. Progresses the extinities of the right limit transcriptional participations.

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.

Cellular Localization Nucleus

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