



Rabbit Anti-SHARP2 antibody

SL19756R

Product Name:	SHARP2
Chinese Name:	SHARP2蛋白抗体
Alias:	Basic helix loop helix domain containing class B 2; BHLHB 2; BHLHB2; bHLHe40; Class B Basic Helix Loop Helix Protein 2; Class E basic helix loop helix protein 40; Clast5; DEC 1; DEC1; Differentially expressed in chondrocytes 1; Differentially expressed in chondrocytes protein 1; Differentiated embryo chondrocyte expressed gene 1; E47 interaction protein 1; EIP1; Enhancer of Split and Hairy Related Protein 2; SHARP 2; Stimulated by retinoic acid gene 13 protein; Stimulated with retinoic acid 13; STRA 13; Stra 14; STRA13; Stra14.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SHARP2:101-200/412
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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

Subunit:

Homodimer. Heterodimer with BHLHE41/DEC2. Interacts with TCF3/E47. Interacts with ubiquitin-conjugating enzyme UBE2I/UBC9. Interacts with HDAC1, SUMO1, RXRA and ARNTL/BMAL1.

Subcellular Location:

Nuclear

Tissue Specificity:

Expressed in cartilage, spleen, intestine, lung, and to a lesser extent in heart, brain, liver, muscle and stomach.

Post-translational modifications:

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.

Similarity:

Contains 1 bHLH (basic helix-loop-helix) domain; Contains 1 Orange domain.

SWISS:

O14503

Gene ID:

8553

Database links:

[Entrez Gene: 8553](#) Human

[Entrez Gene: 20893](#) Mouse

[Entrez Gene: 79431](#) Rat

[Entrez Gene: 324413](#) Zebrafish

[Omim: 604256](#) Human

[SwissProt: Q5EA15](#) Cow

[SwissProt: O14503](#) Human

[SwissProt: O35185](#) Mouse

[SwissProt: O35780](#) Rat

[Unigene: 171825](#) Human

[Unigene: 2436](#) Mouse

[Unigene: 81055](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.