



# Clock rabbit pAb

Cat No.:ES2004

For research use only

## Overview

<b>Product Name</b>	Clock rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Clock. AA range:241-290
<b>Specificity</b>	Clock Polyclonal Antibody detects endogenous levels of Clock protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Circadian locomoter output cycles protein kaput
<b>Gene Name</b>	CLOCK
<b>Cellular localization</b>	Nucleus . Cytoplasm . Cytoplasm, cytosol . Shuttling between the cytoplasm and the nucleus is under circadian regulation and is ARNTL/BMAL1-dependent. Phosphorylated form located in the nucleus while the nonphosphorylated form found only in the cytoplasm.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	95kD
<b>Human Gene ID</b>	9575
<b>Human Swiss-Prot Number</b>	O15516
<b>Alternative Names</b>	CLOCK; BHLHE8; KIAA0334; Circadian locomoter output cycles protein kaput; hCLOCK; Class E basic

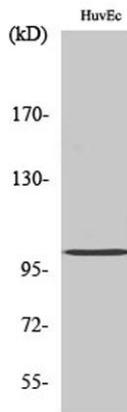




## Background

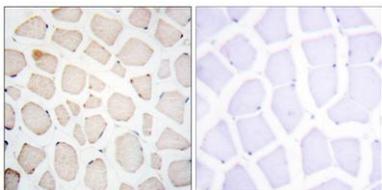
### helix-loop-helix protein 8; bHLHe8

The protein encoded by this gene plays a central role in the regulation of circadian rhythms. The protein encodes a transcription factor of the basic helix-loop-helix (bHLH) family and contains DNA binding histone acetyltransferase activity. The encoded protein forms a heterodimer with ARNTL (BMAL1) that binds E-box enhancer elements upstream of Period (PER1, PER2, PER3) and Cryptochrome (CRY1, CRY2) genes and activates transcription of these genes. PER and CRY proteins heterodimerize and repress their own transcription by interacting in a feedback loop with CLOCK/ARNTL complexes. Polymorphisms in this gene may be associated with behavioral changes in certain populations and with obesity and metabolic syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014],



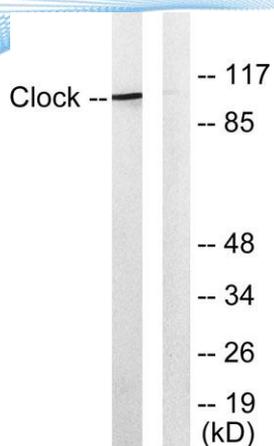
Western Blot analysis of various cells using Clock Polyclonal Antibody

Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using Clock Antibody. The picture on the right is blocked with the synthesized peptide.





**ELK Biotechnology**



Western blot analysis of lysates from HUVEC cells, using Clock Antibody. The lane on the right is blocked with the synthesized peptide.



+86-27-59760950

[ELKbio@ELKbiotech.com](mailto:ELKbio@ELKbiotech.com)

[www.elkbiotech.com](http://www.elkbiotech.com)

23-2, No.388 Gaoxin 2nd Road,Wuhan East Lake Hi-tech Development Zone, Hubei , P.R.C