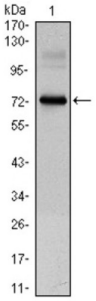
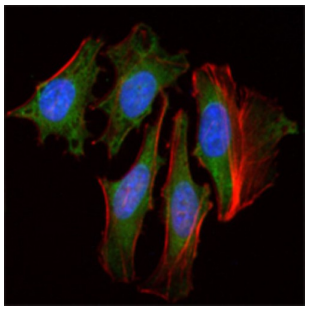
Circadian Locomoter Output Cycles Protein Kaput (CLOCK) Antibody

Catalogue No.:abx010471



Western blot analysis using CLOCK antibody against CLOCK (AA: 200-465) -hIgGFc transfected HEK293 cell lysate.



Immunofluorescence analysis of Hela cells using CLOCK antibody (green). Red: Actin filaments have been labeled with AF555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

BMAL1/2-CLOCK heterodimers activate E-box element (3'- CACGTG-5') transcription of a number of proteins of the circadian clock. Activates transcription of PER1 and PER2. This transcription is inhibited in a feedback loop by PER and CRY proteins. Component of the circadian clock oscillator which includes the CRY proteins, CLOCK or NPAS2, BMAL1 or BMAL2, CSNK1D and/or CSNK1E, TIMELESS and the PER proteins. Efficient DNA binding requires dimerization with another bHLH protein. Heterodimerization with BMAL1 is required for E-box-dependent transactivation, for CLOCK nuclear translocation and degradation, and, for phosphorylation of both CLOCK and BMAL1. Interaction with PER and CRY proteins requires translocation to the nucleus. Interaction of the CLOCK-BMAL1 heterodimer with PER or CRY inhibits transcription activation. Binds weakly ARNT and ARNT2 to form heterodimers which bind poorly to the E-box motif.

Target:	Circadian Locomoter Output Cycles Protein Kaput (CLOCK)
Clonality:	Monoclonal
Reactivity:	Human
Tested Applications:	ELISA, IF/ICC
Host:	Mouse
Recommended dilutions:	ELISA: 1/10000, IF/ICC: 1/200 - 1/1000. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Purified recombinant fragment of human CLOCK expressed in E. coli.

Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951
Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413
Abbexa BV, Leiden, NL
Website: www.abbexa.com · Email: info@abbexa.com

Isotype:	IgG_1
Form:	Liquid
Purification:	Unpurified ascites.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	O15516 (UniProt, ExPASy)
Gene Symbol:	CLOCK
GeneID:	9575
OMIM:	601851
HGNC:	2082
KEGG:	hsa:9575
Ensembl:	ENSG00000134852
String:	9606.ENSP00000308741
Molecular Weight:	95 kDa
Buffer:	Ascitic fluid containing 0.03% sodium azide.
Concentration:	Not determined.
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951
Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413
Abbexa BV, Leiden, NL
Website: www.abbexa.com · Email: info@abbexa.com