Recombinant Human CLOCK protein, His & T7-tagged

Cat. No. CLOCK-1526H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CLOCK aa. (Ala34~Ala379 (Accession # O15516)) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Ala34~Ala379
Description	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.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 44.0kDa
Endotoxin	<1.0EU per 1ug (determined by the LAL method)

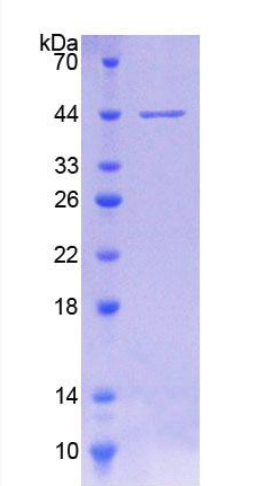
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Purity	>95%
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.
Isoelectric Point	6.2

GENE INFORMATION

Gene Name	CLOCK clock circadian regulator [Homo sapiens (human)]
Official Symbol	CLOCK
Synonyms	CLOCK; clock circadian regulator; KAT13D; bHLHe8; circadian locomoter output cycles protein kaput; circadian locomoter output cycles kaput protein; class E basic helix-loop-helix protein 8; clock homolog
Gene ID	9575
mRNA Refseq	NM_001267843.1

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Protein Refseq	NP_001254772.1
UniProt ID	O15516
SDS-PAGE	

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