Anti-Human/Mouse/Rat CLOCK Polyclonal Antibody

Polyclonal Antibody

Cat.NO.: PA02894

3th Edition

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.CLOCK (Clock Circadian Regulator) is a Protein Coding gene. Diseases associated with CLOCK include Delayed Sleep Phase Syndrome and Cluster Headache. Among its related pathways are Circadian rythm related genes and Influenza A. GO annotations related to this gene include transcription factor activity, sequence-specific DNA binding and signal transducer activity. An important paralog of this gene is NPAS2.

Antigen: Synthesized peptide derived from the Internal region of human Clock

Form:

How to use:1.0 ml distilled water will be added to the product

Stability: Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

Dilution:PBS (pH7.4) containing 1% BSA

Application: This antibody can be used for western blotting in concentration of 1?5?g/ml.

Specificity: Expressed in all tissues examined including spleen, thymus, prostate, testis, ovary, small intestine, colon, leukocytes, heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Highest levels in testis and skeletal muscle. Low levels in thymus, lung and liver. Expressed in all brain regions with highest levels in cerebellum. Highly expressed in the suprachiasmatic nucleus (SCN).