

Product Name: Per3 Rabbit Polyclonal Antibody**Catalog #: APRab15971**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	43kDa

Antigen Information

Gene Name	PER3
Alternative Names	PER3; GIG13; Period circadian protein homolog 3; hPER3; Cell growth-inhibiting gene 13 protein; Circadian clock protein PERIOD 3
Gene ID	8863.0
SwissProt ID	P56645
Immunogen	The antiserum was produced against synthesized peptide derived from human PER3. AA range:21-70

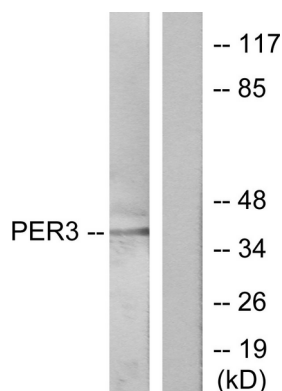
Background

This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. Genes in this family encode components of the circadian rhythms of locomotor activity, metabolism, and behavior. This gene is upregulated by CLOCK/ARNTL heterodimers but then represses this upregulation in a feedback loop using PER/CRY heterodimers to interact with CLOCK/ARNTL. Polymorphisms in this gene have been linked to sleep disorders. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2014],function:Component of the circadian clock mechanism which is essential for generating circadian rhythms. Function unknown.,PTM:Phosphorylation appears to require association with PER1 and translocation to the nucleus.,PTM:Ubiquitinated.,similarity:Contains 1 PAC (PAS-associated C-terminal) domain.,similarity:Contains 2 PAS (PER-ARNT-SIM) domains.,subcellular location:Mainly cytoplasmic. Translocates to the nucleus through binding PER1, PER2, CRY1 or CRY2, but not TIMELESS.,subunit:Homodimer. Component of the circadian core oscillator, which includes the CRY proteins, CLOCK or NPAS2, BMAL1 or BMAL2, CSNK1D and/or CSNK1E, TIMELESS and the PER proteins. Interacts directly with PER1, PER2, CRY1, CRY2, and TIMELESS. Interaction with CSNK1D or CSNK1E promotes nuclear location of PER proteins.,

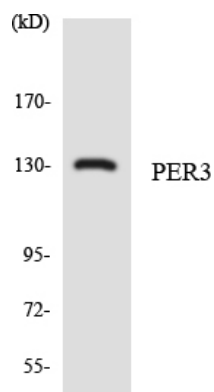
Research Area

Circadian rhythm;

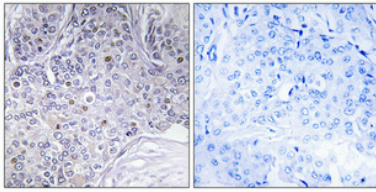
Image Data



Western blot analysis of lysates from Jurkat cells, treated with insulin 0.01U/ml 15', using PER3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using PER3 antibody.



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4°, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.