产品名称: Per2 Rabbit Polyclonal Antibody

产品货号: APRab15969



### 产品概述 (Summary)

产品名称 (Production Name) Per2 Rabbit Polyclonal Antibody

描述 (Description) Rabbit polyclonal Antibody

宿主 (Host) Rabbit

应用 (Application)IHC,ICC/IF,ELISA种属反应性 (Reactivity)Human,Mouse

#### 产品性能 (Performance)

偶联物 (Conjugation)Unconjugated修饰 (Modification)Unmodified

同种型 (Isotype) IgG

克隆 (Clonality) Polyclonal 形式 (Form) Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 存放说明 (Storage)

freeze/thaw cycles.

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% 储存溶液 (Buffer)

New type preservative N.

纯化方式 (Purification) Affinity purification

# 免疫原信息 (Immunogen)

基因名 (Gene Name) PER2

PER2; KIAA0347; Period circadian protein homolog 2; hPER2; Circadian clock **别名 (Alternative Names)** 

protein PERIOD 2

基因 ID (Gene ID) 8864.0

O15055.The antiserum was produced against synthesized peptide derived 蛋白ID (SwissProt ID)

from human Period Circadian Protein 2. AA range:636-685

#### 产品应用 (Application)

稀释比 (Dilution Ratio) IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000

蛋白分子量 (Molecular Weight)

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#### 研究背景 (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 may increase the risk of getting certain cancers and have been linked to sleep disorders. [provided by RefSeq, Jan 2014], disease: Defects in PER2 are a cause of familial advanced sleep-phase syndrome (FASPS) [MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are 'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms, function: Component of the circadian clock mechanism which is essential for generating circadian rhythms. Negative element in the circadian transcriptional loop. Influences clock function by interacting with other circadian regulatory proteins and transporting them to the nucleus. Negatively regulates CLOCK NPAS2-BMAL1|BMAL2-induced transactivation., induction: Serum-induced levels in fibroblasts show circadian oscillations. Maximum levels after 1 hour stimulation, minimum levels after 12 hours. Another peak is then observed after 24 hours., PTM: Phosphorylated by CSNK1E and CSNK1D. Phosphorylation results in PER2 protein degradation., similarity: Contains 1 PAC (PAS-associated C-terminal) domain., similarity: Contains 2 PAS (PER-ARNT-SIM) domains,, subcellular location: Mainly nuclear. Nucleocytoplasmic shuttling is effected by interaction with other circadian core oscillator proteins and/or by phosphorylation. Retention of PER1 in the cytoplasm occurs through PER1-PER2 heterodimer formation or by interaction with CSNK1E and/or phosphorylation which appears to mask the PER nuclear localization signal. Also translocated to the nucleus by CRY1 or CRY2., subunit: 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 and PER3, and through a C-terminal domain, with CRY1 and CRY2. Interaction with CSNK1D or CSNK1E promotes nuclear location of PER proteins. Interacts, via its second PAS domain, with TIMELESS in vitro. Interacts with NFIL3, tissue specificity: Widely expressed. Found in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. High levels in skeletal muscle and pancreas. Low level in lung.,

### 研究领域 (Research Area)

Circadian rhythm;

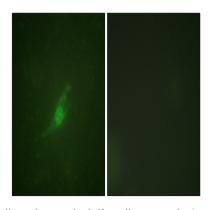
图片 (Image Data)

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Immunofluorescence analysis of NIH/3T3 cells, using Period Circadian Protein 2 Antibody. The picture on the right is blocked with the synthesized peptide.

# 注意事项 (Note)

For research use only.

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