节律抑制蛋白 PER1 抗体

产品货号： mIR2350

英文名称： PER1 protein

中文名称： 节律抑制蛋白 PER1 抗体

别　　名： Circadian clock protein PERIOD 1; Circadian clock protein PERIOD1; Circadian pacemaker protein Rigui; hPER 1; hPER; hPER1; KIAA0482; MGC88021; PER 1; PER; PER1; PER1 protein; PER1_HUMAN; Period 1; Period circadian protein homolog 1; Period drosophila homolog of; Period homolog 1; Period1; RIGUI.

研究领域： 细胞生物　免疫学　染色质和核信号　神经生物学　表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 136kDa

细胞定位： 细胞核 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human PER1 protein:751-850/1290

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed： **PubMed**

产品介绍 background:

In mammals, several genes that encode members of the basic helix-loop helix (bHLH) PAS (PER-ARNT-SIM) transcription factor family have been shown to play a significant role in regulating circadian oscillations. Transactivation of CLOCK-induced genes is mediated via an E box enhancer (CACGTG) found upstream of target genes. CLOCK-ARNT 3 heterodimers bind to E box regulatory elements and stimulate gene transcription. CLOCK has been shown to transactivate the mammalian homolog of Drosophila PER. PER, in concert with the product of the mammalian timeless gene (TIM), negatively regulates its own transcription by blocking the activity of the CLOCK-BMAL 1 transactivation complex.

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. Can bind heme (By similarity).

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 TIMELESS, PER2, PER3 and, through a C-terminal domain, with CRY1 and CRY2. Interaction with CSNK1D or CSNK1E promotes nuclear location of PER proteins. Interacts with GPRASP1 (By similarity). Binding to CSNK1G2 triggers proteasomal degradation.

Subcellular Location:

Nucleus (By similarity). Cytoplasm (By similarity). Note=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 PER1 nuclear localization signal. Also translocated to the nucleus by CRY1 or CRY2 (By similarity).

Tissue Specificity:

Widely expressed. Found in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, kidney, spleen, thymus,

prostate, testis, ovary and small intestine. Highest level in skeletal muscle. Low level in kidney.

Post-translational modifications:

Phosphorylated on serine residues by CSNK1E. Also can be phosphorylated by the delta isoform. Phosphorylation by CSNK1 retains PER1 in the cytoplasm and leads to its ubiquitination and subsequent degradation.

Ubiquitinated (By similarity).

Similarity:

Contains 1 PAC (PAS-associated C-terminal) domain.

Contains 2 PAS (PER-ARNT-SIM) domains.

SWISS:

O15534

Gene ID:

5187

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Per1 蛋白的作用是机体生理节奏调节的核心基因，也是影响肿瘤发生发展的重要蛋白。调节机体生理节奏、调控细胞周期和促进 DNA 损伤修复等作用。Per1 广泛参与了细胞的周期调控、DNA 损伤修复、细胞凋亡和肿瘤细胞增殖等过程

产品图片