Datasheet for ABIN5692917

anti-PER1 antibody (AA 1119-1200)

2 Images

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Overview

Quantity:	100 µg
Target:	PER1
Binding Specificity:	AA 1119-1200
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human PER1 recombinant protein (Position: D1119-M1200).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for PER1 detection. Tested with WB, IHC-P, Direct ELISA in Human,Mouse,Rat.

Target Details

Target:	PER1
Alternative Name:	PER1 (PER1 Products)
Background:	Synonyms: Period circadian protein homolog 1, hPER1, Circadian clock protein PERIOD 1, Circadian pacemaker protein Rigui, PER1, KIAA0482, PER, RIGUI Tissue Specificity: Widely expressed. Expressed in hair follicles (at protein level).Found in heart,

Target Details

	brain, placenta, lung, liver, skeletal muscle, pancreas, kidney, spleen, thymus, prostate, testis, ovary and small intestine. Highest level in skeletal muscle. Background: The PER1 gene encodes the period circadian protein homolog 1 protein in humans. 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. Alternative splicing has been observed in this gene, however, these variants have not been fully described.
UniProt:	O15534
Pathways:	Photoperiodism

Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). Application Details: Western blot, 0.1-0.5 μg/mL Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/mL Direct ELISA, 0.1-0.5 μg/mL
Restrictions:	For Research Use only

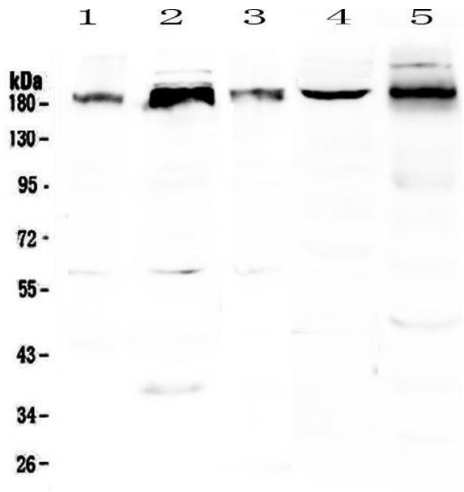
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 μg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month.

Handling

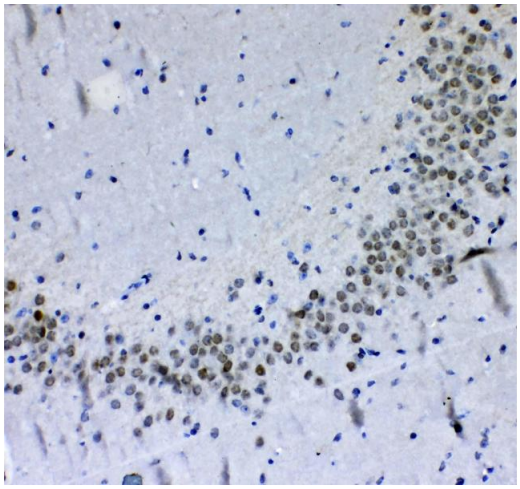
It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Images



Western Blotting

Image 1. Western blot analysis of PER1 using anti-PER1 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human PANC cell lysate, Lane 2: human MCF-7 cell lysate, Lane 3: human COLO-320 cell lysate, Lane 4: rat heart tissue lysate, Lane 5: mouse brain tissue lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PER1 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PER1 at approximately 200KD. The expected band size for PER1 is at 136KD.



Immunohistochemistry

Image 2. IHC analysis of PER1 using anti-PER1 antibody . PER1 was detected in paraffin-embedded section of rat brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-PER1 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

