For Research Use Only

PER1 Polyclonal antibody

Catalog Number:13463-1-AP 15 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
13463-1-AP

Size:
150ul , Concentration: 450 µg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4249

GenBank Accession Number:
BC028207

GeneID (NCBI):
5187

UNIPROT ID:
O15534

Full Name:
period homolog 1 (Drosophila)

Calculated MW:
1290 aa, 136 kDa

Observed MW:
50-55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:3000
IHC 1:50-1:500
IF/ICC 1:20-1:200

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF, ChIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : A549 cells, human brain tissue, mouse kidney tissue, mouse liver tissue

IHC : human breast cancer tissue, human tonsillitis tissue

IF/ICC : Hela cells,

Background Information

PER1 is a master regulator of circadian rhythm and functions in the nucleus to repress expression of the central circadian clock genes. The periodicity of PER1 abundance, nuclear translocation, and transcriptional repression is regulated by PER1 phosphorylation, ubiquitination, and proteasomal degradation [PMID: 21514639]. It is one component of the circadian clock mechanism which is essential for generating circadian rhythms. It can influences clock function by interacting with other circadian regulatory proteins and transporting them to the nucleus [PMID: 9856465, 20930143]. In addition to bands of the predicted molecular mass of 140 kDa, additional PER1 species of 55 and 45 kDa is detected that is predominantly nuclear [PMID: 11726537] .

Notable Publications

Author	Pubmed ID	Journal	Application
Mark A Naven	35664072	Theranostics	IF
Xinxing Wan	33741899	Cell Death Dis	WB
Yi-Dong Chen	35720196	Gastroenterol Rep (Oxf)	WB

Storage

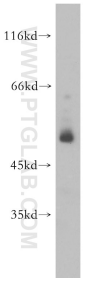
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

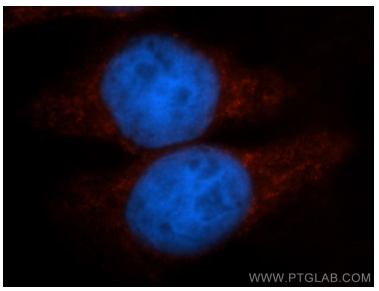
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

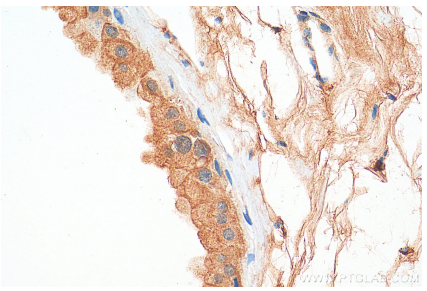
Selected Validation Data



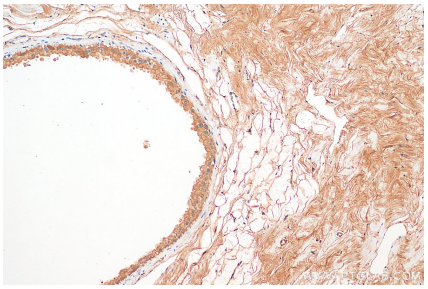
A549 cells were subjected to SDS PAGE followed by western blot with 13463-1-AP (PER1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



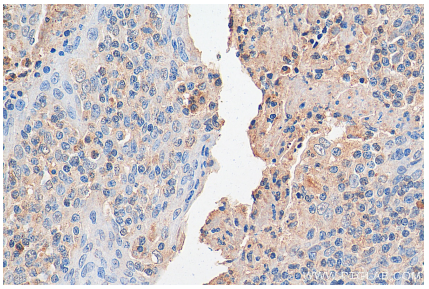
Immunofluorescent analysis of Hela cells, using PER1 antibody 13463-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13463-1-AP (PER1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13463-1-AP (PER1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 13463-1-AP (PER1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).