

For Research Use Only

PER1 Polyclonal antibody

Catalog Number: 13463-1-AP **13 Publications**



Basic Information

Catalog Number: 13463-1-AP	GenBank Accession Number: BC028207	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 450 µg/ml by Nanodrop;	GeneID (NCBI): 5187	Recommended Dilutions: WB 1:500-1:3000 IHC 1:50-1:500 IF 1:20-1:200
Source: Rabbit	Full Name: period homolog 1 (Drosophila)	
Isotype: IgG	Calculated MW: 1290 aa, 136 kDa	
Immunogen Catalog Number: AG4249	Observed MW: 50-55 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : A549 cells, human brain tissue, mouse kidney tissue, mouse liver tissue IHC : human breast cancer tissue, human tonsillitis tissue IF : HeLa cells,
Cited Applications: IF, IHC, WB	
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

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 influence 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

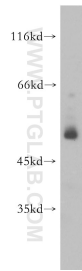
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

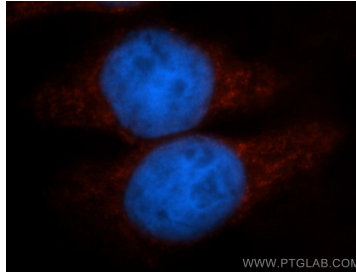
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

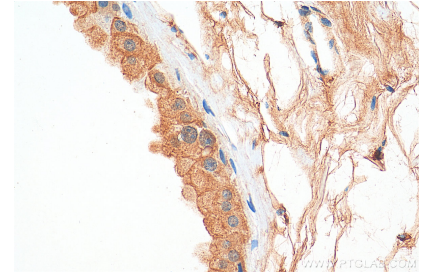
Selected Validation Data



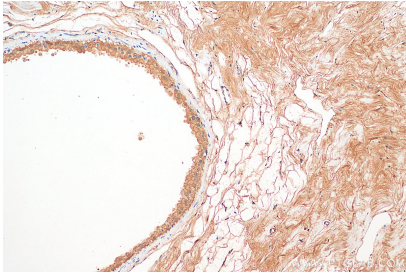
A549 cells were subjected to SDS PAGE followed by western blot with 13463-1-AP (PER1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



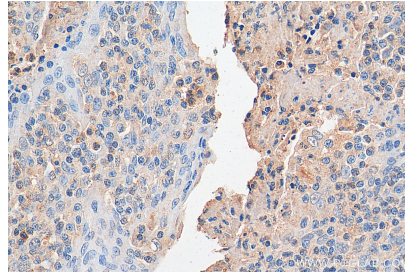
Immunofluorescent analysis of HeLa cells, using PER1 antibody 13463-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



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).