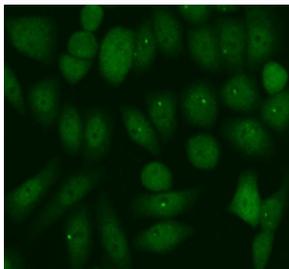


## PER1 Antibody / Period circadian protein homolog 1 (RQ4051)

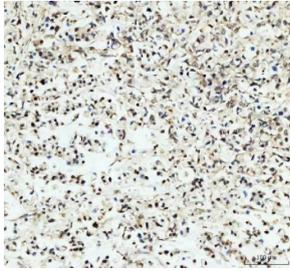
Catalog No.	Formulation	Size
RQ4051	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### Bulk quote request

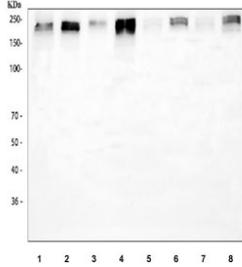
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	O15534
<b>Localization</b>	Nuclear, cytoplasmic
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This PER1 antibody is available for research use only.



Immunofluorescent staining of FFPE human SiHa cells with PER1 antibody (green).  
HIER: steam section in pH6 citrate buffer for 20 min.



IHC testing of FFPE human gastric cancer tissue with PER1 antibody at 1ug/ml. Required HIER: steam section in pH8 EDTA buffer for 20 min and allow to cool prior to testing.



Western blot testing of 1) human A549, 2) human 293T, 3) human A431, 4) human HeLa, 5) rat brain, 6) rat PC-3, 7) mouse brain and 8) mouse HEPA1-6 cell lysate with PER1 antibody at 0.5ug/ml. Predicted molecular weight ~136 kDa, may be observed at ~200 kDa due to ubiquitination.

## Description

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.

## Application Notes

Optimal dilution of the PER1 antibody should be determined by the researcher.

## Immunogen

A recombinant human partial protein corresponding to amino acids D1119-M1200 was used as the immunogen for the PER1 antibody.

## Storage

After reconstitution, the PER1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

## References (1)