

For Research Use Only

# CoraLite® Plus 488-conjugated PER2 (isoform 1) Monoclonal antibody

Catalog Number:CL488-67513



## Basic Information

<b>Catalog Number:</b> CL488-67513	<b>GenBank Accession Number:</b> NM_022817	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8864	<b>CloneNo.:</b> 2E6C3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O15055	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> period homolog 2 (Drosophila)	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG29489	<b>Calculated MW:</b> 137 kDa	
	<b>Observed MW:</b> 150-160 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : HepG2 cells,
<b>Species Specificity:</b> human	

## Background Information

PER2, also named as KIAA0347, is a component of the circadian clock mechanism which is essential for generating circadian rhythms. Defects in PER2 are a cause of familial advanced sleep-phase syndrome (FASPS) which is characterized by very early sleep onset and offset. There are two isoforms of PER2: isoform 1 has an expected molecular size of about 140 kDa, and 67513-1-Ig detected molecular weight of 150-160 kDa (PMID:16675517), while isoform 2, known as PER2S (a second splicing variant of the human PER2 gene), has a molecular weight of about 45 kDa (PMID:26347774).

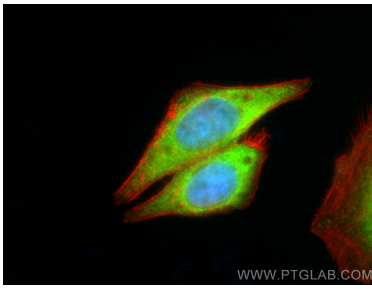
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

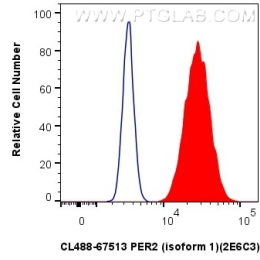
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 488 PER2 (isoform 1) antibody (CL488-67513, Clone: 2E6C3) at dilution of 1:200, CL594-Phalloidin (red).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Per2 (Isoform 1) Monoclonal Antibody (CL488-67513, Clone:2E6C3) (red), or 0.8 ug CoraLite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).