

**Per2 (phospho Ser662) rabbit pAb****Cat#: orb770771 (Manual)**

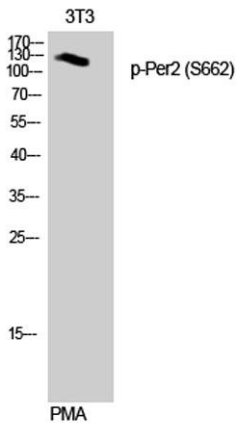
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<b>Product Name</b>	Per2 (phospho Ser662) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Period Circadian Protein 2 around the phosphorylation site of Ser662. AA range:636-685
<b>Specificity</b>	Phospho-Per2 (S662) Polyclonal Antibody detects endogenous levels of Per2 protein only when phosphorylated at S662.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Period circadian protein homolog 2
<b>Gene Name</b>	PER2
<b>Cellular localization</b>	[Isoform 1]: Nucleus . Cytoplasm . Cytoplasm, perinuclear region . Nucleocytoplasmic shuttling is effected by interaction with other circadian core oscillator proteins and/or by phosphorylation. Translocate to the nucleus after phosphorylation by CSNK1D or CSNK1E. Also translocated to the nucleus by CRY1 or CRY2. PML regulates its nuclear localization. .; [Isoform 2]: Nucleus, nucleolus .

<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	120kD
<b>Human Gene ID</b>	8864
<b>Human Swiss-Prot Number</b>	O15055
<b>Alternative Names</b>	PER2; KIAA0347; Period circadian protein homolog 2; hPER2; Circadian clock protein PERIOD 2

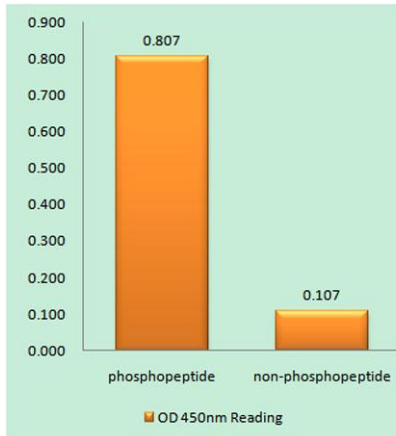
**Background**

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 and have been linked to sleep disorders. [provided by RefSeq, Jan 2014],

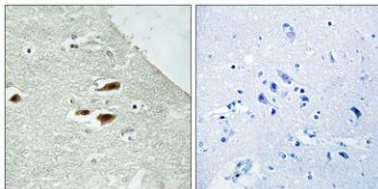


**Western Blot analysis of 3T3 cells using Phospho-Per2 (S662) Polyclonal Antibody diluted at 1:500**

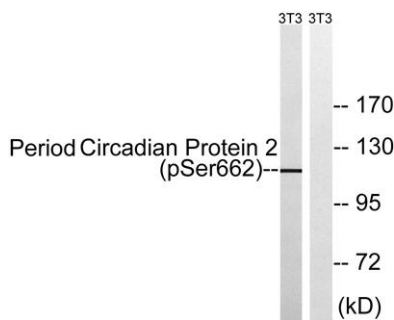
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**Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Period Circadian Protein 2 (Phospho-Ser662) Antibody**



**Immunohistochemistry analysis of paraffin-embedded human brain, using Period Circadian Protein 2 (Phospho-Ser662) Antibody. The picture on the right is blocked with the phospho peptide.**



**Western blot analysis of lysates from NIH/3T3 cells treated with PMA 125ng/ml 30', using Period Circadian Protein 2 (Phospho-Ser662) Antibody. The lane on the right is blocked with the phospho peptide.**