

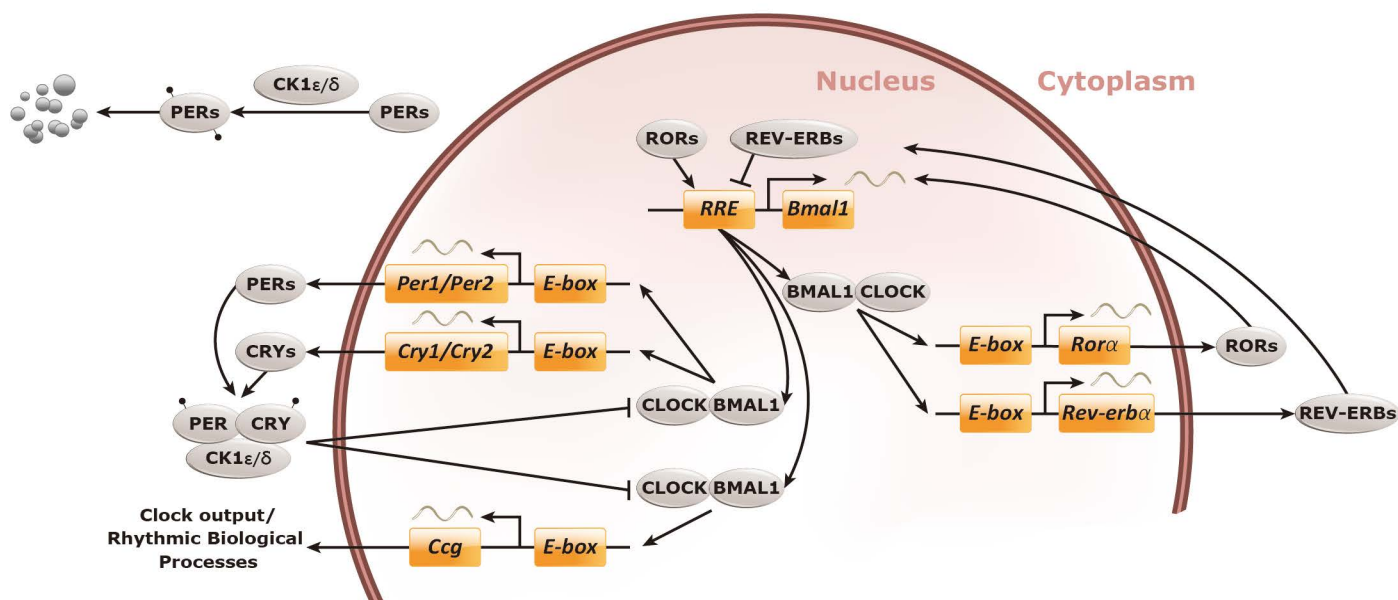
Circadian Rhythm

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Accelerated Discovery



The primary mammalian circadian clock is located in the suprachiasmatic nuclei in the hypothalamus. The molecular mechanism for the oscillation of the circadian rhythm involves a transcription-translation feedback loop of clock genes expressed by almost all cells. In particular, BMAL1, CLOCK, PERs, and CRYs play central roles in the oscillation of the circadian rhythm and rhythmically regulate downstream gene expression (1). BMAL1 and CLOCK form a heterodimer that binds to the regulatory region (E-box) of *Per1/2* and *Cry1/2* to positively regulate transcription. PER and CRY proteins then form a complex and negatively regulate the transcriptional effects of BMAL1 and CLOCK.

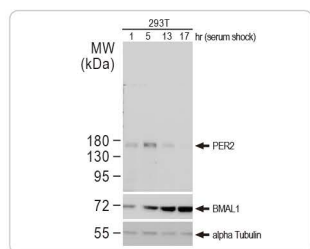
References: 1. Human Molecular Genetics, Volume 15, Pages R271–R277

Citation Support

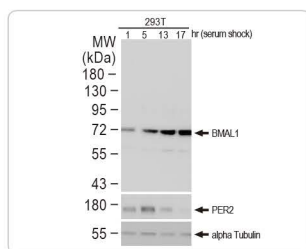
Comparable Abs

Orthogonal Validation

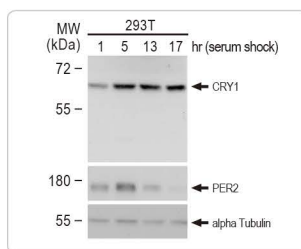
Protein Overexpression



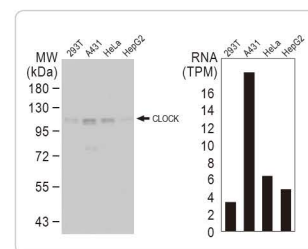
PER2 antibody
(GTX129688)



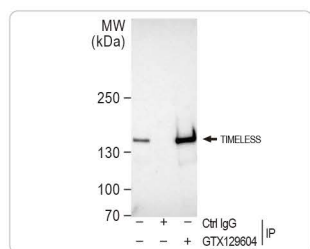
BMAL1 antibody [N1N3]
(GTX105060)



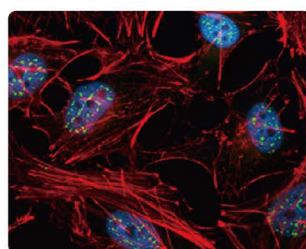
CRY1 antibody
(GTX132177)



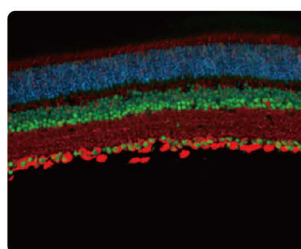
CLOCK antibody
(GTX134464)



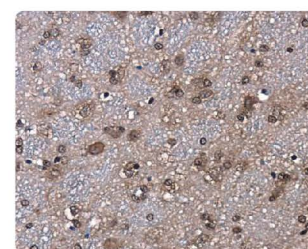
Timeless antibody
(GTX129604)



ROR alpha antibody [C3],
C-term (GTX108201)



NPAS2 antibody [C1C3]
(GTX105741)



ID2 antibody (GTX109113)

	Cat. No.	Product Name	Host & Clonality	Reactivity	Applications
	GTX115314	ARNT2 antibody [N2C1], Internal	Rb pAb	Ms	WB
	GTX33019	ARNT2 antibody	Rb pAb	Hu, Ms, Rat	WB, IHC-P
	GTX84851	BMAL1 antibody [3G9]	Ms mAb	Hu, Ms, Rat, Dog	WB, ICC/IF, FACS
	GTX84852	BMAL1 antibody [1C11]	Ms mAb	Hu	WB, ICC/IF, IHC-P
	GTX105060	BMAL1 antibody [N1N3]	Rb pAb	Hu, Ms	WB, ICC/IF
	GTX105584	Casein Kinase 1 alpha 1L antibody	Rb pAb	Hu, Rat	WB, ICC/IF, IHC-P
	GTX55230	Casein Kinase 1 gamma antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-P
	GTX107762	Casein Kinase 1 gamma 2 antibody [N3C3]	Rb pAb	Hu	WB
	GTX33123	Casein Kinase 1 gamma 2 antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF
	GTX123435	Casein Kinase 1 delta antibody	Rb pAb	Hu, Ms	WB, ICC/IF, IHC-P
	GTX55549	Casein Kinase 1 epsilon antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-P
	GTX134464	CLOCK antibody	Rb pAb	Hu	WB
	GTX112846	CREB antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-P, IHC-Fr
	GTX130379	CREB (phospho Ser133) antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX132177	CRY1 antibody	Rb pAb	Hu	WB
	GTX33120	CRY1 antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX45786	CRY2 antibody, N-term	Rb pAb	Hu	WB, IHC-P
	GTX77870	DBP antibody, N-term	Rb pAb	Hu	WB, IHC-P
	GTX109113	ID2 antibody [N1C3]	Rb pAb	Hu, Ms, Rat	WB, IHC-P, IHC-Fr
	GTX19383	Melanopsin antibody	Rb pAb	Hu, Ms, Rat, Rodent	WB, ICC/IF, IHC-Fr, IHC
	GTX113904	NR1D1 antibody	Rb pAb	Hu, Ms	WB, ICC/IF, IHC-P
	GTX129228	NFIL3 antibody	Rb pAb	Hu	WB
	GTX105741	NPAS2 antibody [C1C3]	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-P, IHC-Fr
	GTX80745	NPY2R antibody	Rb pAb	Ms, Rat	IHC
	GTX54847	Orexin Receptor 1 antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-P, IHC-Fr
	GTX54848	Orexin Receptor 2 antibody	Rb pAb	Hu, Ms, Rat	WB, ICC/IF, IHC-Fr
	GTX119431	PASD1 antibody	Rb pAb	Hu	WB, ICC/IF
	GTX128974	PER1 antibody	Rb pAb	Hu, Rat	WB
	GTX129596	PER1 antibody	Rb pAb	Hu, Ms	WB
	GTX129688	PER2 antibody	Rb pAb	Hu, Ms	WB, IHC-P
	GTX134478	PER2 antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX100029	ROR alpha antibody [N2N3]	Rb pAb	Hu, Ms	WB
	GTX108201	ROR alpha antibody [C3], C-term	Rb pAb	Hu, Ms	WB, ICC/IF
	GTX114722	ROR beta antibody	Rb pAb	Hu, Ms, Rat	WB, IHC-Fr
	GTX108728	ROR gamma antibody	Rb pAb	Hu	WB, ICC/IF
	GTX30289	Serotonin N-AT antibody	Rb pAb	Hu, Primate	WB, ICC/IF
	GTX31099	Serotonin antibody [5-HT-H209]	Ms mAb	Hu, Ms, Chk, Pig, RMK	ICC/IF, IHC-P, IHC-Fr, IHC
	GTX129604	Timeless antibody	Rb pAb	Hu, Ms	WB, ICC/IF, IP
	GTX104334	Timeless antibody [N1N2], N-term	Rb pAb	Hu	WB, ICC/IF, IHC-P