

**bs-11441R****[ Primary Antibody ]****Bioss**  
ANTIBODIES

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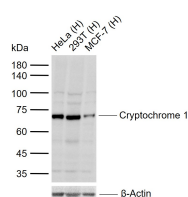
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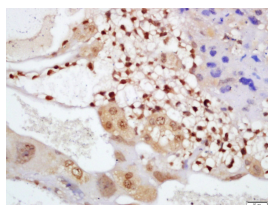
400-901-9800

**Cryptochrome 1 Rabbit pAb****DATASHEET**

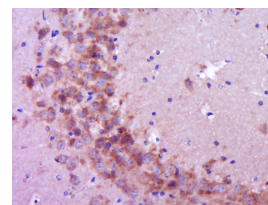
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 1407	<b>SWISS:</b> Q16526	<b>IHC-F</b> (1:100-500)
<b>Target:</b> Cryptochrome 1		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human Cryptochrome 1: 251-350/586.		<b>Reactivity:</b> Human, Mouse (predicted: Rat, Rabbit, Pig, Sheep, Cow, Chicken, Dog)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 64 kDa
<b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.		<b>Subcellular Location:</b> Cytoplasm ,Nucleus
<b>Background:</b> Circadian clocks are biological timepieces that regulate hormonal rhythms, sleep cycles and feeding behaviors. These rhythms are generated in the superchiasmatic nucleus (SCN), a cell-autonomous circadian oscillator located within the brain that is synchronized with the environment by light. A number of transcription factors, including Clock and BMAL1, are molecular components of the SCN that induce the expression of proteins involved in light/dark cycle entrainment, which include Per1 and Per2. Tim, for timeless, generates a negative feedback loop that regulates the activity of Clock by suppressing the expression of Clock target genes. Tim forms heterodimers with Per1 and Per2 that bind Clock and block the activation of Clock-BMAL1 dimers to repress Per gene expression. Additionally, the CRY proteins, which are cryptochrome photoreceptors for the circadian clock, function as light-independent inhibitors of the circadian clock. CRY1 and CRY2 negatively regulate SCN components by associating with the activators Clock-BMAL1, and also with the various feedback inhibitors Per1, Per2 and Tim.		

**VALIDATION IMAGES**

Sample: Lane 1: Human HeLa cell lysates Lane 2: Human 293T cell lysates Lane 3: Human MCF-7 cell lysates Primary: Anti-Cryptochrome 1 (bs-11441R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 64 kDa Observed band size: 70 kDa



Tissue/cell: mouse placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Cryptochrome-1 Polyclonal Antibody, Unconjugated (bs-11441R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody (SP-0023) and DAB (C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cryptochrome 1) Polyclonal Antibody, Unconjugated (bs-11441R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

**SELECTED CITATIONS**

- **[IF=1.778]** Zhao Shu-Qin. et al. The in vitro effects of melatonin and Cry gene on the secretion of estradiol from camel

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- ovarian granulosa cells. Domest Anim Endocrin. 2021 Jan;74:106497 IF ;Camel. 32799039
- **[IF=1.778]** S.-Q. Zhao. et al. cAMP/PKA/CREB signaling pathway-mediated effects of melatonin receptor genes on clock gene expression in Bactrian camel ovarian granulosa cells. Domest Anim Endocrin. 2021 Jul;76:106609 IHC ;Camel. 33636446