bs-20203R **[Primary Antibody]**

Cryptochrome 1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1407 **SWISS:** Q16526

Target: Cryptochrome 1

Immunogen: KLH conjugated synthetic peptide derived from human Cryptochrome 1 : 181-280/586.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 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.

Background: 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.

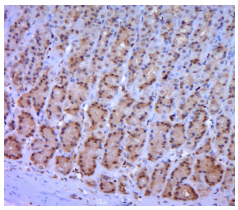
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Rat (predicted: Human, Mouse, Pig, Sheep, Cow, Horse)

Predicted MW.: 64 kDa

Subcellular Location: Cytoplasm ,Nucleus

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); 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-20203R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

SELECTED CITATIONS

- **[IF=3.1]** Shuqin Zhao. et al.Melatonin modulated GPX5 and PTGDS expression in Bactrian camel epididymis mainly via

receptor MT1.biology of reproduction.2025 Feb 14:ioaf030. IHC ;Camel. 39951496

- **[IF=3.1]** Shuqin Zhao. et al.Melatonin modulated GPX5 and PTGDS expression in Bactrian camel epididymis mainly via receptor MT1.BIOLOGY OF REPRODUCTION.2025 Feb 14:ioaf030. IHC ;Bactrian camel. 10.1093/biolre/ioaf030