

# **CRY2** polyclonal antibody

Catalog: BCP00580 Host: Rabbit Reactivity: Human

#### **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 comassociating ponents by with Clock-BMAL1, and also with the various feedback inhibitors Per1. Per2 and Tim.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

#### **Molecular Weight:**

~ 65 kDa

#### **Swiss-Prot:**

Q49AN0

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

WB: 1:1000~1:2000 IF: 1:50~1:200

## **Storage&Stability:**

Store at  $4 \,\mathrm{C}$  short term. Aliquot and store at  $-20 \,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

CRY2 polyclonal antibody detects endogenous levels of CRY2 protein.

#### **DATA:**



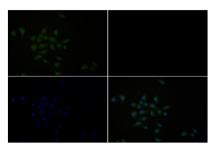
Western blot (WB) analysis of CRY2 polyclonal antibody at 1:2000 di-

Lane1:A549 whole cell lysate(40ug)

Lane2:Hela whole cell lysate(40ug)

Lane3:U-87MG whole cell lysate(40ug)

Lane4:K562 whole cell lysate(40ug)



Immunofluorescence analysis of A549 cells using CRY2 antibody at dilution of 1:50.

#### Note:

For research use only, not for use in diagnostic procedure.