



## *Anti-human/mouse CRY1 Antibody*

### ORDERING INFORMATION

**Catalog Number:** AF3764

**Lot Number:** YEV01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human/mouse CRY1

**Immunogen:** *E. coli*-derived rhCRY1 (aa 115 - 224)

**Ig Type:** goat IgG

**Applications:** Western blot  
Immunohistochemistry  
Direct ELISA

### ***Preparation***

Produced in goats immunized with purified, *E. coli*-derived, recombinant human Cryptochrome 1 (rhCRY1; aa 115 - 224; Accession # Q16526). CRY1 specific IgG was purified by human CRY1 affinity chromatography. CRY1 is a critical component of the circadian oscillator that represses CLOCK:BMAL1 mediated transcription when translocated into the nucleus. It is a member of the DNA photolyase family but has no photolyase activity. Over the region used as immunogen, human and mouse CRY1 share 94% amino acid sequence homology.

### ***Formulation***

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### ***Reconstitution***

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

### ***Storage***

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### ***Specificity***

This antibody has been selected for its ability to recognize CRY1 in the applications listed below.

### ***Applications***

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect CRY1. The detection limit for rhCRY1 is approximately 2 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 10% cross-reactivity with rhCRY2. This antibody has not been optimized for use in Western blot with cell lysates.

**Immunohistochemistry** - This antibody has been used at a concentration of 10 µg/mL to detect CRY1 in cryosections of adult mouse testis. Tissue was fixed overnight in 4% PFA plus 14% picric acid in PBS at 2 - 8° C. Sections were blocked with 10% donkey serum and 0.1% Triton in 1% BSA in PBS for 45 minutes at room temperature. After blocking, cells were incubated with primary antibody for 3 hours at room temperature followed by fluorochrome-coupled anti-goat IgG at room temperature for 1 hour. Between each step, sections were washed with 0.1% BSA in PBS.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect CRY1. The detection limit for rhCRY1 is approximately 0.05 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**