

CRY2 rabbit pAb

Catalog No: YT6482

Reactivity: Human; Mouse; Rat

Applications: WB

Target: CRY2

Fields: >>Circadian rhythm

Gene Name: CRY2 KIAA0658

Q49AN0

Q9R194

Protein Name: CRY2

Human Gene Id: 1408

Human Swiss Prot

Iuman Swiss Frot

No:

Mouse Gene ld: 12953

Mouse Swiss Prot

No:

Rat Gene Id: 170917

Rat Swiss Prot No: Q92318

Immunogen: Synthesized peptide derived from human CRY2 AA range: 181-231

Specificity: This antibody detects endogenous levels of CRY2 at Human/Mouse/Rat

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1 ? 500-2000

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

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chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 65kD

Background: This gene encodes a flavin adenine dinucleotide-binding protein that is a key

component of the circadian core oscillator complex, which regulates the circadian clock. This gene is upregulated by CLOCK/ARNTL heterodimers but then represses this upregulation in a feedback loop using PER/CRY heterodimers to interact with CLOCK/ARNTL. Polymorphisms in this gene have been associated with altered sleep patterns. The encoded protein is widely conserved across plants and animals. Two transcript variants encoding different isoforms have been

found for this gene. [provided by RefSeq, Feb 2014],

Function: cofactor:Binds 1 5,10-methenyltetrahydrofolate non-covalently per

subunit.,cofactor:Binds 1 FAD per subunit.,function:Blue light-dependent regulator of the circadian feedback loop. Inhibits CLOCK|NPAS2-ARNTL E box-mediated transcription. Acts, in conjunction with CRY2, in maintaining period length and circadian rhythmicity. Has no photolyase activity. Capable of

translocating circadian clock core proteins such as PER proteins to the nucleus. May inhibit CLOCK|NPAS2-ARNTL transcriptional activity through stabilizing the

unphosphorylated form of ARNTL.,online information:Cryptochrome

entry,PTM:Phosphorylation on Ser-266 by MAPK is important for the inhibition of CLOCK-ARNTL-mediated transcriptional activity. Phosphorylation by CSKNE requires interaction with PER1 or PER2.,similarity:Belongs to the DNA photolyase class-1 family.,similarity:Contains 1 DNA photolyase domain.,subcellular locat

Subcellular Location:

Cytoplasm . Nucleus . Translocated to the nucleus through interaction with other

Clock proteins such as PER2 or ARNTL.

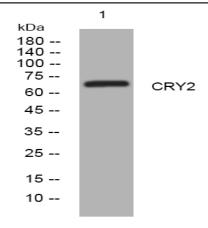
Expression: Expressed in all tissues examined including fetal brain, fibroblasts, heart, brain,

placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and leukocytes. Highest levels in heart and

skeletal muscle.

Products Images

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Western blot analysis of lysates from U2OS cells, primary antibody was diluted at 1:1000, 4° over night