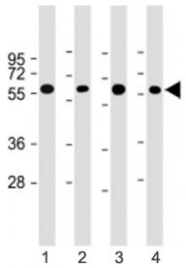
CRY2 Antibody / Cryptochrome 2 [clone 1819CT334.92.36.9] (F54116)

Catalog No.	Formulation	Size
F54116-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54116-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1819CT334.92.36.9
Purity	Protein G purified
UniProt	Q49AN0
Applications	Western Blot : 1:4000
Limitations	This CRY2 antibody is available for research use only.



Western blot testing of CRY2 antibody at 1:4000: Lane 1) human HepG2, 2) (h) heart lysate; 3) (h) liver lysate and 4) mouse liver lysate. Predicted molecular weight ~67 kDa.

Description

Cryptochrome 2 is a transcriptional repressor which forms a core component of the circadian clock. The circadian clock, an internal time- keeping system, regulates various physiological processes through the generation of approximately 24 hour circadian rhythms in gene expression, which are translated into rhythms in metabolism and behavior. Transcription and translation of core clock components (CLOCK, NPAS2, ARNTL/BMAL1, ARNTL2/BMAL2, PER1, PER2, PER3, CRY1 and CRY2) plays a critical role in rhythm generation, whereas delays imposed by post-translational modifications (PTMs) are important for determining the period (tau) of the rhythms (tau refers to the period of a rhythm and is the length, in time, of one complete cycle). CRY1 and CRY2 have redundant functions but also differential and selective

contributions at least in defining the pace of the SCN circadian clock and its circadian transcriptional outputs. CRY2 is a less potent transcriptional repressor in cerebellum and liver than CRY1, though less effective in lengthening the period of the SCN oscillator and seems to play a critical role in tuning SCN circadian period by opposing the action of CRY1. [UniProt]

Application Notes

The stated application concentrations are suggested starting points. Titration of the CRY2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Recombinant human Cryptochrome 2 was used as the immunogen for the CRY2 antibody.

Storage

Aliquot the CRY2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.