

Rabbit anti-Human, mouse Cry2 Polyclonal Antibody | anti-CRY2 antibody

Cry2 Antibody (C-term)

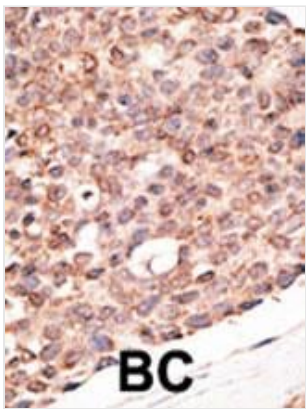
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289507	Rabbit	Human, mouse	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

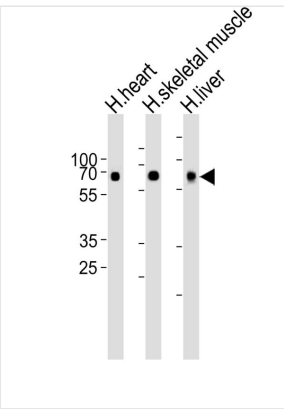
Cry2; Polyclonal Antibody; Cry2 Antibody (C-term); Cryptochrome-2; CRY2; KIAA0658; anti-CRY2 antibody

PRODUCT SPECIFICATIONS

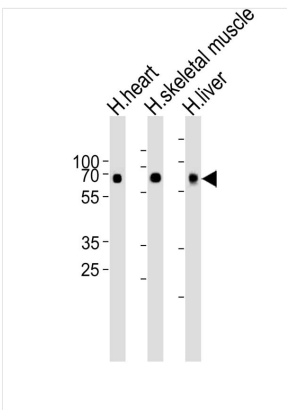
Host	Rabbit
Reactivity	Human, mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This Cry2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 564-593 amino acids from the C-terminal region of human Cry2.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	564-593
Sequence Length	532
Applicable Applications for anti-CRY2 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



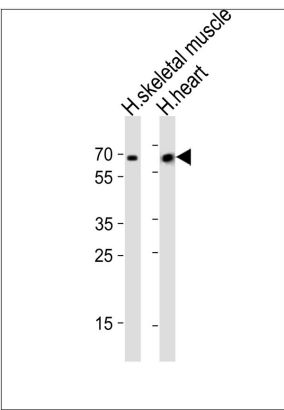
IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)
Western blot analysis of hCRY2-R579 in mouse liver tissue and HepG2 cell line lysates (35ug/lane). CRY2 (arrow) was detected using the purified Pab.



WB (Western Blot)
Western blot analysis of lysates from human heart, skeletal muscle and liver tissue (from left to right), using Cry2 Antibody(R579). AAA289507 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



WB (Western Blot)
Western blot analysis of lysates from human skeletal muscle and human heart tissue (from left to right), using Cry2 Antibody (R579). AAA289507 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

ADDITIONAL INFORMATION

Related Product Information for anti-CRY2 antibody	Various biochemical, physiological and behavioural processes display circadian rhythms controlled by an internal biological clock. The central "gears" driving this clock appear to be composed of an autoregulatory transcription/posttranslation-based feedback loop. Cryptochrome 1 (CRY1) and 2 (CRY2) are DNA-binding flavoproteins that bear some homology to blue-light receptors and photolyases. In Drosophila, CRY is a photoreceptor for the circadian clock where it binds to the clock component TIM in a light-dependent fashion and blocks its function. Mammalian CRY1 and CRY2 function via light-independent interactions with circadian genes CLOCK and BMAL1, as well as with PER1, PER2, and TIM. They seem to act as light-independent components of the circadian clock and likely regulate Per1 transcriptional cycling via interactions with both the activator and its feedback inhibitors. Mutant mice not expressing the Cry1 or Cry2 protein display accelerated and delayed periodicity of locomotor activity, respectively. It appears that the combination of both proteins working together is essential to synchronize the organism to circadian phases. A critical balance between Cry1 and Cry2 is required for proper clock function; in complete darkness, double-mutant mice present with instantaneous arrhythmicity, indicating the absence of an internal circadian clock.
Product Categories/Family for anti-CRY2 antibody	Cardiovascular; Neuroscience

References	Ozgur, S., et al., Biochemistry 42(10):2926-2932 (2003). Griffin, E.A. Jr., et al., Science 286(5440):768-771 (1999). van der Horst, G.T., et al., Nature 398(6728):627-630 (1999). Kobayashi, K., et al., Nucleic Acids Res. 26(22):5086-5092 (1998). Hsu, D.S., et al., Biochemistry 35(44):13871-13877 (1996).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	188536103
NCBI GeneID	1408
NCBI Accession #	NP_001120929.1; NP_066940.2
NCBI GenBank Nucleotide #	NM_001127457.2
UniProt Accession #	Q49AN0; O75148; Q8IV71; B4DH32; B4DZD6
Molecular Weight	66947
NCBI Official Full Name	cryptochrome-2 isoform 2
NCBI Official Synonym Full Names	cryptochrome circadian clock 2
NCBI Official Symbol	CRY2
NCBI Official Synonym Symbols	HCRY2; PHLL2
NCBI Protein Information	cryptochrome-2
UniProt Protein Name	Cryptochrome-2
UniProt Gene Name	CRY2
UniProt Synonym Gene Names	KIAA0658
UniProt Entry Name	CRY2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.