

Product datasheet

Anti-CRY2 antibody ab155255

2 Images

Overview

Product name	Anti-CRY2 antibody
Description	Rabbit polyclonal to CRY2
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Chimpanzee, Gorilla, Orangutan 
Immunogen	Synthetic peptide corresponding to Human CRY2 aa 550 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. Database link: Q49AN0
Positive control	This antibody gave a positive signal in the following Human tissue lysates: Heart; Liver; Skeletal Muscle. IHC-P: FFPE human liver tissue sections.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

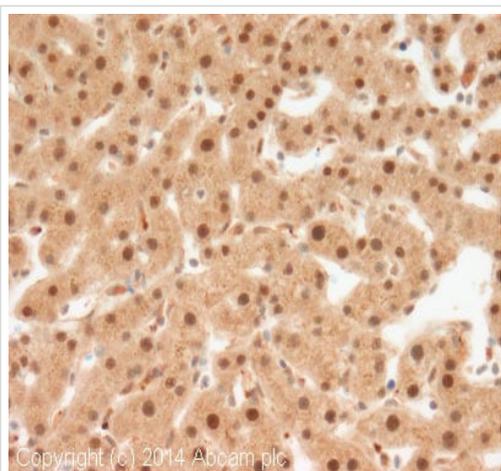
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab155255 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 73 kDa (predicted molecular weight: 67 kDa).

Target

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.
Tissue specificity	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.
Sequence similarities	Belongs to the DNA photolyase class-1 family. Contains 1 DNA photolyase domain.
Post-translational modifications	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. Ubiquitinated by the SCF(FBXL3) and SCF(FBXL21) complex, leading to its degradation.
Cellular localization	Cytoplasm. Nucleus. Translocated to the nucleus through interaction with other Clock proteins such as PER2 or ARNTL.

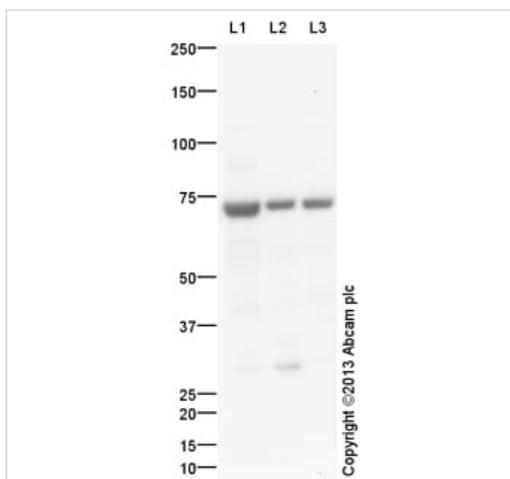
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRY2 antibody (ab155255)

IHC image of CRY2 staining in human liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab155255, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times



Western blot - Anti-CRY2 antibody (ab155255)

All lanes : Anti-CRY2 antibody (ab155255) at 1 µg/ml

Lane 1 : Human heart tissue lysate - total protein (ab29431)

Lane 2 : Human liver tissue lysate - total protein (ab29889)

Lane 3 : Human skeletal muscle tissue lysate - total protein (ab29330)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 67 kDa

Observed band size: 73 kDa

Exposure time: 2 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab155255 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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