abcam

ab217238

Alexa Fluor® 555 Anti-CHD1L antibody [EPR14515(2)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 555
Excitation/Emission	Ex: 555nm, Em: 565nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR14515(2)
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	1/1000
Notes	This product gave a positive signal in HepG2 cells fixed with 4% formaldehyde (10 min)

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CHD1L

Function	ATP-dependent chromatin remodeler that mediates chromatin-remodeling following DNA damage (PubMed:19661379, PubMed:29220652, PubMed:29220653, PubMed:33357431, PubMed:34210977, PubMed:34486521, PubMed:34874266). Recruited to DNA damage sites through interaction with poly-ADP-ribose: specifically recognizes and binds histones that are poly-ADP-ribosylated on serine residues in response to DNA damage (PubMed:19661379, PubMed:29220652, PubMed:29220653, PubMed:34486521, PubMed:34874266). Poly-ADP-ribose-binding activates the ATP-dependent chromatin remodeler activity, thereby regulating chromatin during DNA repair (PubMed:19661379, PubMed:29220652,

PubMed:29220653, PubMed:34486521, PubMed:34874266). Catalyzes nucleosome sliding away from DNA breaks in an ATP-dependent manner (PubMed:19661379, PubMed:29220652, PubMed:29220653). Chromatin remodeling activity promotes PARP2 removal from chromatin (PubMed:33275888).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The CHD1L gene encodes a protein known as chromodomain helicase DNA-binding protein 1-like. This protein plays a role in chromatin remodeling using the energy from ATP hydrolysis to alter chromatin structure thereby facilitating processes such as DNA repair and transcription. The mass of CHD1L is approximately 120 kDa. This protein is expressed in various tissues with a notable presence in liver and cancerous tissues indicating its potential involvement in cellular proliferation and repair mechanisms.
Biological function summary	The function of CHD1L is significant in genomic stability and response to DNA damage. It acts as a part of the chromatin remodeling complex and contributes to the regulation of chromatin dynamics affecting gene expression and repair pathways. CHD1L interacts with other proteins involved in DNA repair ensuring the cell maintains genetic integrity under stress conditions.
Pathways	CHD1L is involved in the DNA damage response and chromatin organization pathways. It interacts with RAD51-associated protein which is important for homologous recombination repair and collaborates with proteins in the pathway to restore DNA integrity after damage. CHD1L's activity in these pathways highlights its role in maintaining cellular homeostasis and preventing genomic instability.
Associated diseases and disorders	CHD1L has been implicated in hepatocellular carcinoma and ovarian cancer. The overexpression of CHD1L in such cancers suggests a role in cancer progression by promoting cell proliferation and survival. Additionally its interaction with HNF4A a protein involved in liver cancer accentuates its impact on oncogenic pathways. Understanding CHD1L in these contexts could offer insights into therapeutic targets for cancer treatment.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

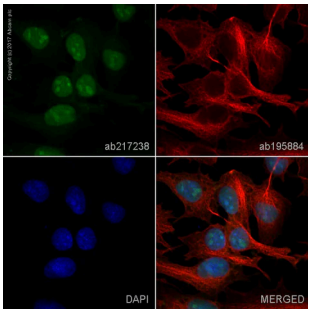
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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-CHD1L antibody [EPR14515(2)] (ab217238)

CHD1L Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CHD1L antibody

ab217238 staining CHD1L in HepG2 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab217238 at 1/1000 dilution (**pseudocolored in green**) and ab195884, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.