abcam

ab315220

Anti-CDKL5 antibody [EPR26906-28]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR26906-28
Purification technique	Affinity purification Protein A
Concentration	Concentration data is not available right now, please try again later Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse

Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CDKL5

Function	Mediates phosphorylation of MECP2 (PubMed:15917271, PubMed:16935860). May regulate ciliogenesis (PubMed:29420175).

Storage

Shipped at conditions	Conditional Ambient
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

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.

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

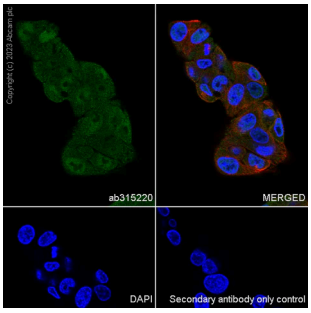
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images



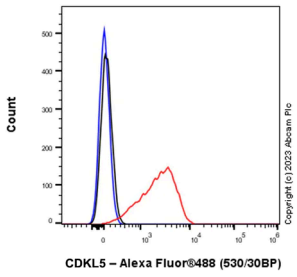
Immunocytochemistry/ Immunofluorescence - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling CDKL5 with ab315220 at 1/50 (10.12 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green).

Confocal image showing cytoplasmic and nuclear staining in HepG2 cells. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

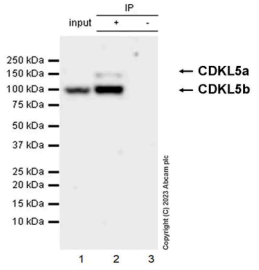
Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Flow Cytometry (Intracellular) - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling CDKL5 with ab315220 at 1/500 dilution (0.1 ug, Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

CDKL5 was immunoprecipitated from 0.35 mg HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate with ab315220 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab315220 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 2: ab315220 IP in HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab315220 in HepG2 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

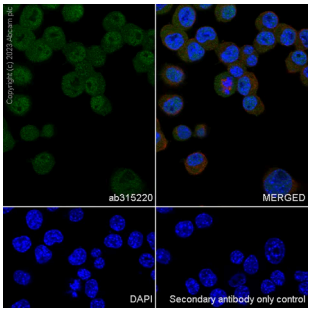
All lanes:
Immunoprecipitation - Anti-CDKL5 antibody [EPR26906-28] (ab315220) at 1/30 dilution

All lanes:
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 24s



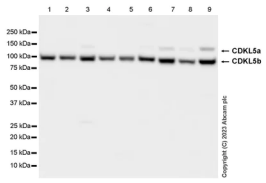
Immunocytochemistry/ Immunofluorescence - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling CDKL5 with ab315220 at 1/50 (10.12 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green).

Confocal image showing cytoplasmic and nuclear staining in Neuro-2a cells. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Western blot - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

CDKL5 Western blot staining using rabbit Anti-CDKL5 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

ab315220 detects both two isoforms of CDKL5, separately named as CDKL5a and CDKL5b, around 130 and 100 kDa in Western blot (PMID: 20861382).

All lanes:
Western blot - Anti-CDKL5 antibody [EPR26906-28] (ab315220) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 50 µg

Lane 2:
Mouse lung tissue lysate at 50 µg

Lane 3:
Mouse liver tissue lysate at 50 µg

Lane 4:
Rat brain tissue lysate at 50 µg

Lane 5:
Rat lung tissue lysate at 50 µg

Lane 6:
Rat lilver tissue lysate at 50 µg

Lane 7:
HEK-293 (human embryonic kidney epithelial cell) whole cell lysate at 50 µg

Lane 8:
PC-3 (human prostate adenocarcinoma epithelial cell) whole cell lysate at 50 µg

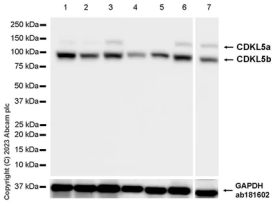
Lane 9:
C2C12 (mouse myoblast) whole cell lysate at 50 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 100 kDa, 130 kDa, 110 kDa

Exposure time: 1s



Western blot - Anti-CDKL5 antibody [EPR26906-28] (ab315220)

CDKL5 Western blot staining using rabbit Anti-CDKL5 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

ab315220 detects both two isoforms of CDKL5, separately named as CDKL5a and CDKL5b, around 130 and 100 kDa in Western blot (PMID: 20861382).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-CDKL5 antibody [EPR26906-28] (ab315220) at 1/1000 dilution

Lane 1:
HepG2 (human hepatocellular carcinoma epithelial cell) transfected with scrambled siRNA control whole cell lysate at 50 µg

Lane 2:
HepG2 transfected with siRNA specifically targeting CDKL5 whole cell lysate at 50 µg

Lane 3:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 50 µg

Lane 4:
Human lung tissue lysate at 50 µg

Lane 5:
Human liver tissue lysate at 50 µg

Lane 6:
LNCaP (human prostate carcinoma epithelial cell) whole cell lysate at 50 µg

Lane 7:
Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 50 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 100 kDa, 130 kDa, 110 kDa, 36 kDa

Exposure time: 1s

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