abcam

ab222112

Anti-D Box Binding Protein antibody [EPR22370-51]

Recombinant | RabMAb

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	EPR22370-51
Purification technique	Affinity purification Protein A
Concentration	0.598 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Transfected cell lysate, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell lysate
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human, Transfected cell lysate
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100

Notes	-

Not recommended

Species	Transfected cell lysate, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/600
Notes	-

Not recommended

Species	Transfected cell lysate, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information DBP

Function	This transcriptional activator recognizes and binds to the sequence 5'-RTTAYGTAAY-3' found in the promoter of genes such as albumin, CYP2A4 and CYP2A5. It is not essential for circadian rhythm generation, but modulates important clock output genes. May be a direct target for regulation by the circadian pacemaker component clock. May affect circadian period and sleep regulation.

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

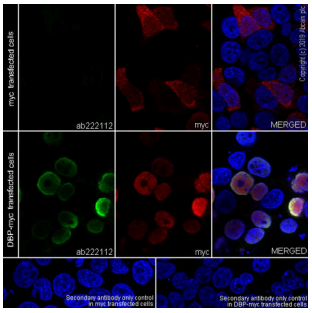
We do not recommend this combination. It is not covered by our product promise.

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.

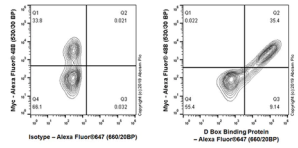
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

D Box Binding Protein Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-D Box Binding Protein antibody

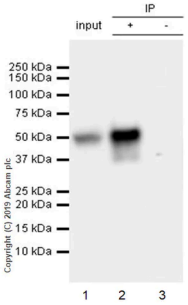
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) cells labelling D Box Binding Protein with ab222112 at 1/100 dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in HEK-293T cells transfected with myc-tagged D Box Binding Protein expression vector. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

D Box Binding Protein Flow Cytometry (Intracellular) staining using rabbit Anti-D Box Binding Protein antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HEK-293T (Human embryonic kidney epithelial cell) (transfected with myc-his tagged D Box Binding Protein expression vector) cells labelling D Box Binding Protein with ab222112 at 1/600 dilution (Right) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Left). Secondary antibody isGoat anti rabbit IgG (Alexa Fluor® 647, ab150079) at 1/2000 dilution. Cells were stained with rabbit IgG (Left) or ab222112 (Right). Then stained with anti-myc tag conjugated to Alexa Fluor® 488.



Immunoprecipitation - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

D Box Binding Protein was immunoprecipitated from 0.35 mg HEK-293T (Human embryonic kidney epithelial cell) transfected with myc-His tagged D Box Binding Protein expression vector, whole cell lysate, with ab222112 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab222112 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: HEK-293T (Human embryonic kidney epithelial cell) transfected with myc-His tagged D Box Binding Protein expression vector whole cell lysate 10ug.

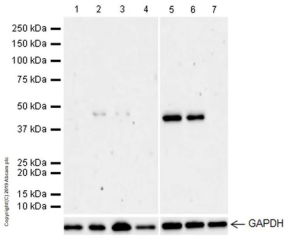
Lane 2: ab222112 IP in HEK-293T transfected with myc-His tagged D Box Binding Protein expression vector whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab222112 in HEK-293T transfected with myc-His tagged D Box Binding Protein expression vector whole cell lysate.

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

Exposure time: 5 seconds.
All lanes:
Immunoprecipitation - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

Predicted band size: 34 kDa



Western blot - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

D Box Binding Protein Western blot staining using rabbit Anti-D Box Binding Protein antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
The DBP protein is ubiquitously expressed but mainly at suprachiasmatic nuclei in the hypothalamus or liver, and fine-tuned by circadian clock. The antibody detects a band around the reported molecular weight of DBP in human hypothalamus and brain tissue lysates. Negative control: testis (PMID: 2331750)

Exposure time: 3 minutes.

All lanes:
Western blot - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112) at 1/1000 dilution

Lane 1:
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
HEK-293T (human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 3:
HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
Human liver lysate at 20 µg

Lane 5:
Human hypothalamus lysate at 20 µg

Lane 6:
Human brain lysate at 20 µg

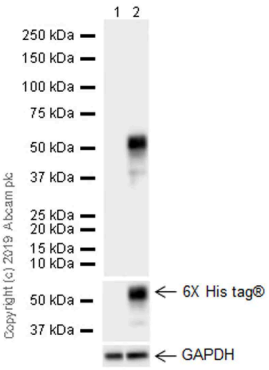
Lane 7:
Human testis lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 34 kDa

Observed band size: 45 kDa



Western blot - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Exposure time: 6 seconds.

All lanes:
Western blot - Anti-D Box Binding Protein antibody [EPR22370-51] (ab222112) at 1/1000 dilution

Lane 1:
HEK-293T (human embryonic kidney) transfected with an empty vector (vector control), containing a myc-His-tag®, whole cell lysate at 10 µg

Lane 2:
HEK-293T transfected with D Box Binding Protein (WT) expression vector containing a myc-His-tag®, whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 34 kDa

Observed band size: 52 kDa

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