abcam

ab126774

Anti-DNAJA1 antibody [EPR7248]

Recombinant | RabMAb | KO Validated

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	EPR7248
Purification technique	Affinity purification Protein A
Dissociation constant	4.2 x 10^{-11} M
Concentration	0.116 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Expected

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

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information DNAJA1

Function	Co-chaperone for HSPA8/Hsc70 (PubMed:10816573). Stimulates ATP hydrolysis, but not the folding of unfolded proteins mediated by HSPA1A (in vitro) (PubMed:24318877). Plays a role in protein transport into mitochondria via its role as co-chaperone. Functions as a co-chaperone for HSPA1B and negatively regulates the translocation of BAX from the cytosol to mitochondria in response to cellular stress, thereby protecting cells against apoptosis (PubMed:14752510). Promotes apoptosis in response to cellular stress mediated by exposure to anisomycin or UV (PubMed:24512202).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

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.

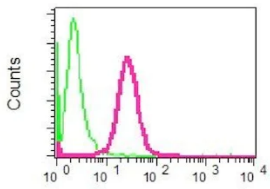
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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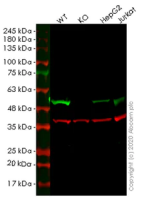
5 product images



Flow Cytometry (Intracellular) - Anti-DNAJA1 antibody [EPR7248] (ab126774)

DNAJA1 Flow Cytometry (Intracellular) staining using rabbit Anti-DNAJA1 antibody

ab126774 at 1/10 dilution staining DNAJA1 in permeabilized Jurkat cells by intracellular flow cytometry (red). Rabbit IgG negative control (green).



Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774)

DNAJA1 Western blot staining using rabbit Anti-DNAJA1 antibody

Lanes 1-4: Merged signal (red and green). Green - ab126774 observed at 49 kDa. Red - loading control ab8245 observed at 36 kDa.
ab126774 Anti-DNAJA1 antibody [EPR7248] was shown to specifically react with DNAJA1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266437 (knockout cell lysate ab257925) was used. Wild-type and DNAJA1 knockout samples were subjected to SDS-PAGE. ab126774 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774) at 1/1000 dilution

Lane 1:
Wild-type HEK293T cell lysate at 20 µg

Lane 2:

Western blot - Human DNAJA1 knockout HEK-293T cell lysate (ab257925) at 20 µg

Lane 3:
HepG2 cell lysate at 20 µg

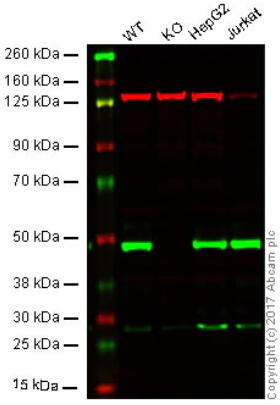
Lane 4:
Jurkat cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 45 kDa

Observed band size: 49 kDa



Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774)

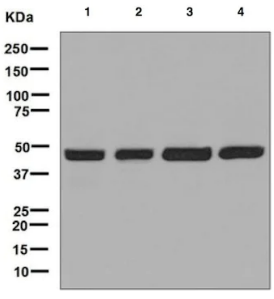
DNAJA1 Western blot staining using rabbit Anti-DNAJA1 antibody

Lane 1: Wild-type DNAJA1 whole cell lysate (20 µg)
Lane 2: DNAJA1 knockout DNAJA1 whole cell lysate (20 µg)
Lane 3: HepG2 whole cell lysate (20 µg)
Lane 4: Jurkat whole cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab126774 observed at 45 kDa. Red - loading control, ab18058, observed at 130 kDa.

ab126774 was shown to recognize DNAJA1 in wild-type HAP1 samples along with additional cross-reactive bands. No band was observed when DNAJA1 knockout samples were examined. Wild-type and DNAJA1 knockout samples were subjected to SDS-PAGE. ab126774 and ab18058 (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/10,000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774)

Predicted band size: 45 kDa



Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774)

All lanes:
Western blot - Anti-DNAJA1 antibody [EPR7248] (ab126774) at 1/10000 dilution

Lane 1:
HepG2 cell lysate at 10 µg

Lane 2:
SKBR 3 cell lysate at 10 µg

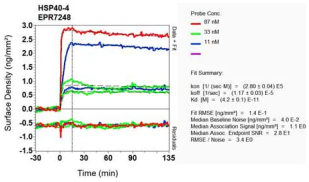
Lane 3:
Jurkat cell lysate at 10 µg

Lane 4:
Raji cell lysate at 10 µg

Secondary

All lanes:
Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 45 kDa



OI-RD Scanning - Anti-DNAJA1 antibody [EPR7248] (ab126774)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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