abcam

ab174273

Anti-KLC1 antibody [EPR12441(B)]

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	EPR12441(B)
Purification technique	Affinity purification Protein A
Concentration	0.327 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50 - 1/500
Notes	-

Predicted

Species	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 KLC1

Function	Kinesin is a microtubule-associated force-producing protein that may play a role in organelle transport (PubMed:21385839). The light chain may function in coupling of cargo to the heavy chain or in the modulation of its ATPase activity (By similarity).

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

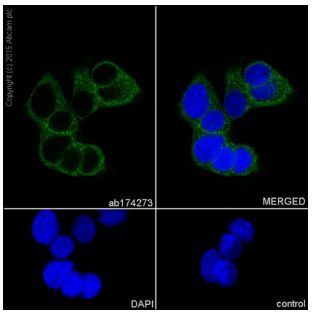
We do not recommend this combination. It is not covered by our product promise.

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.

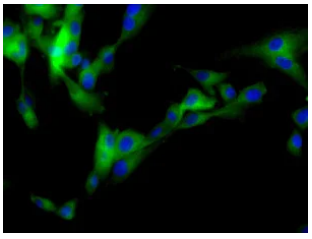
7 product images



Immunocytochemistry/ Immunofluorescence - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

KLC1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KLC1 antibody

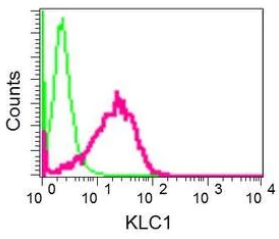
Immunocytochemistry/Immunofluorescence analysis of MCF-7 (human breast carcinoma) labelling KLC1 with purified ab174273 at 1/500. Cells were fixed with 100% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (ab150077). Nuclei counterstained with DAPI (blue).
Control: PBS only



Immunocytochemistry/ Immunofluorescence - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

KLC1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KLC1 antibody

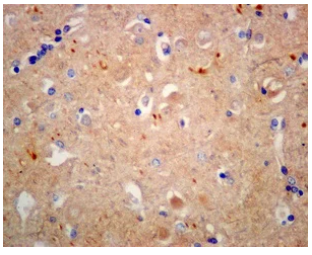
Immunofluorescent analysis of U87-MG cells labeling KLC1 with ab174273 at 1/50 dilution.



Flow Cytometry (Intracellular) - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

KLC1 Flow Cytometry (Intracellular) staining using rabbit Anti-KLC1 antibody

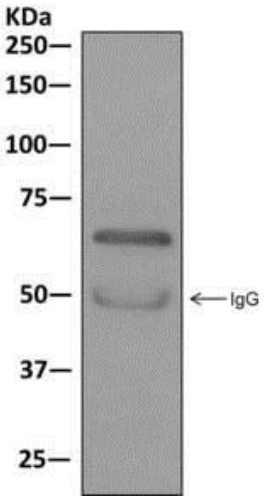
Intracellular flow cytometric analysis of permeabilized HeLa cells labeling KLC1with ab174273 at 1/10 dilution (red) or a rabbit IgG (negative) (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

KLC1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KLC1 antibody

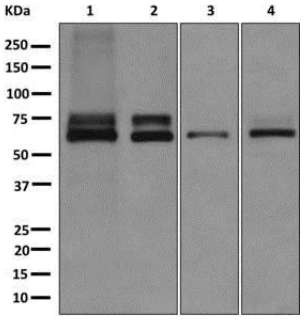
Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling KLC1 with ab174273 at 1/50 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunoprecipitation - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

Western blot analysis on immunoprecipitation pellet from SH-SY5Y cell lysate using ab174273 at 1/10 dilution.
All lanes:
Immunoprecipitation - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

Predicted band size: 65 kDa



Western blot - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

All lanes:
Western blot - Anti-KLC1 antibody [EPR12441(B)] (ab174273) at 1/1000 dilution

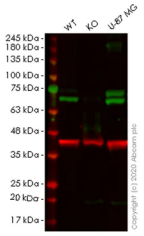
Lane 1:
U87-MG cell lysate at 10 µg

Lane 2:
293T cell lysate at 10 µg

Lane 3:
SH-SY5Y cell lysate at 10 µg

Lane 4:
HeLa cell lysate at 10 µg

Predicted band size: 65 kDa



Western blot - Anti-KLC1 antibody [EPR12441(B)] (ab174273)

KLC1 Western blot staining using rabbit Anti-KLC1 antibody

Lanes 1-3: Merged signal (red and green). Green - ab174273 observed at 65 kDa. Red - loading control ab8245 observed at 36 kDa.
ab174273 Anti-KLC1 antibody [EPR12441(B)] was shown to specifically react with KLC1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265284 (knockout cell lysate ab257496) was used. Wild-type and KLC1 knockout samples were subjected to SDS-PAGE. ab174273 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-KLC1 antibody [EPR12441(B)] (ab174273) at 1/1000 dilution

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

Lane 2:
Western blot - Human KLC1 knockout HeLa cell lysate (ab257496) at 20 µg

Lane 3:
U-87 MG 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: 65 kDa

Observed band size: 65 kDa

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