


Product datasheet

Anti-YTHDC2 antibody [EPR21820-49] α b220160

KO **VALIDATED** Recombinant RabMAb[®]

★★★★★ [4 Abreviews](#) [10 References](#) [12 Images](#)

Overview

Product name	Anti-YTHDC2 antibody [EPR21820-49]
Description	Rabbit monoclonal [EPR21820-49] to YTHDC2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, IP, WB, IHC-Fr Unsuitable for: ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Cow, Pig, Non human primates 
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type mESC, HT-1080, HeLa, HEK-293, NIH/3T3, PC-12 whole cell lysates. IHC-P: Human testis, Mouse testis and Rat testis tissues. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate. IHC-Fr: Mouse testis, Rat testis tissues.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR21820-49

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab220160 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

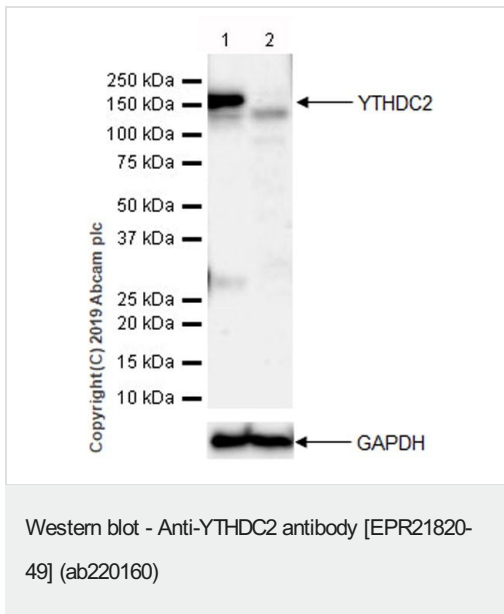
Application	Abreviews	Notes
Flow Cyt (Intra)		1/600.
IHC-P	★★★★★ (1)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
WB	★★★★☆ (2)	1/1000. Detects a band of approximately 160 kDa (predicted molecular weight: 160 kDa).
IHC-Fr		1/50.

Application notes Is unsuitable for ICC/IF.

Target

Sequence similarities Belongs to the DEAD box helicase family. DEAH subfamily.
Contains 2 ANK repeats.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.
Contains 1 R3H domain.
Contains 1 YTH domain.

Images



All lanes : Anti-YTHDC2 antibody [EPR21820-49] (ab220160) at 1/1000 dilution

Lane 1 : Wild-type mESC (mouse embryo stem cell) whole cell lysate

Lane 2 : YTHDC2 knockout mESC whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary

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

Predicted band size: 160 kDa

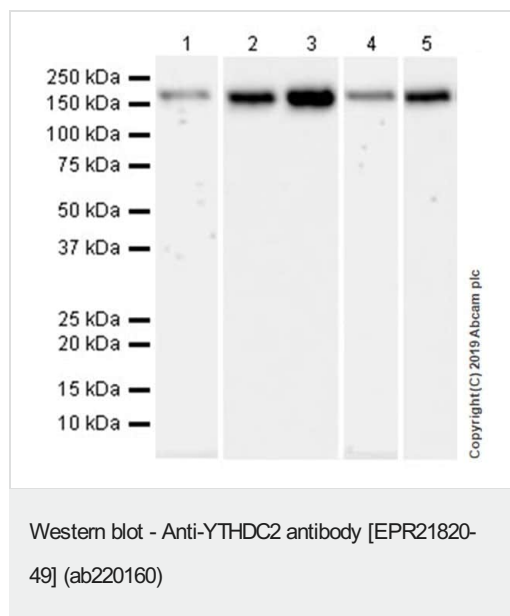
Observed band size: 160 kDa

Exposure time: 3 minutes

Blocking and dilution bufer: 5% NFDm/TBST.

The wild-type and YTHDC2 knockout cell lysates were kindly provided by an anonymous collaborator.

ab220160 was shown to specifically react with YTHDC2 in wild-type mESC cells as signal was lost in YTHDC2 knockout cells. Wild-type and YTHDC2 knockout samples were subjected to SDS-PAGE. ab220160 and [ab181602](#) (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at 1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-YTHDC2 antibody [EPR21820-49] (ab220160) at 1/1000 dilution

Lane 1 : HT-1080 (human fibrosarcoma epithelial cell) whole cell lysate

Lane 2 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : HEK-293 (human embryonic kidney epithelial cell) whole cell lysate

Lane 4 : NIH/3T3 (mouse embryonic fibroblast) whole cell lysate

Lane 5 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

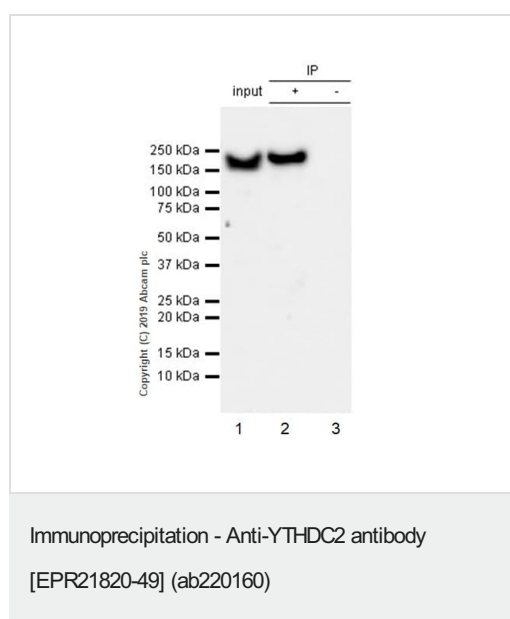
Predicted band size: 160 kDa

Observed band size: 160 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times.

Lane 1: 3 minutes; Lanes 2-3: 37 seconds; Lane 4: 3 minutes; Lane 5: 37 seconds.



YTHDC2 was immunoprecipitated from 0.35 mg of HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab220160 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab220160 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) ([ab131366](#)), was used as secondary antibody at 1/5000 dilution.

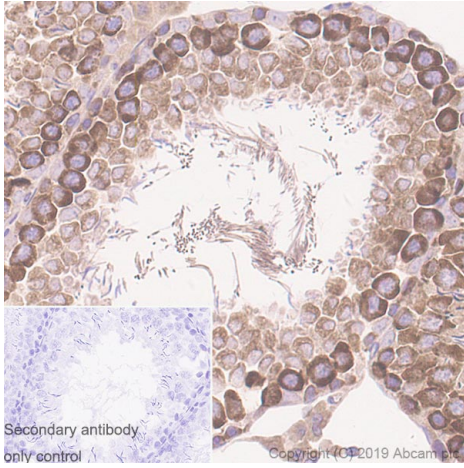
Lane 1: HeLa whole cell lysate 10 µ (Input).

Lane 2: ab220160IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab220160 in HeLa whole cell lysate.

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

Exposure time: 30 seconds.

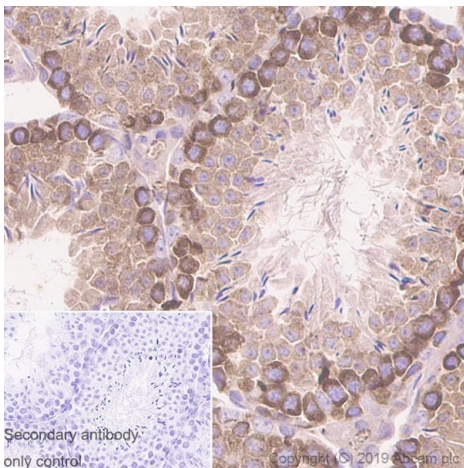


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling YTHDC2 with ab220160 at 1/500 dilution (1.19 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Cytoplasmic staining on rat testis (PMID:28380054). Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

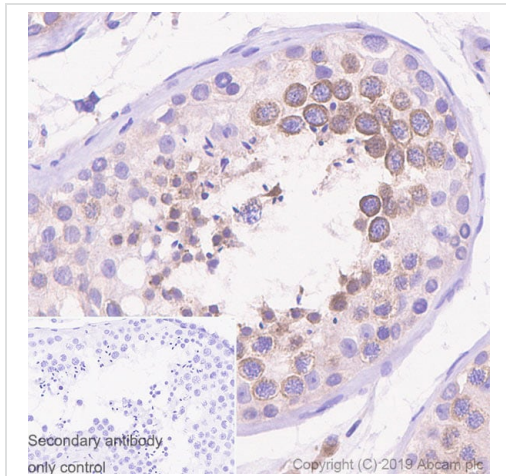


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling YTHDC2 with ab220160 at 1/500 dilution (1.19 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Cytoplasmic staining on mouse testis (PMID:28380054). Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

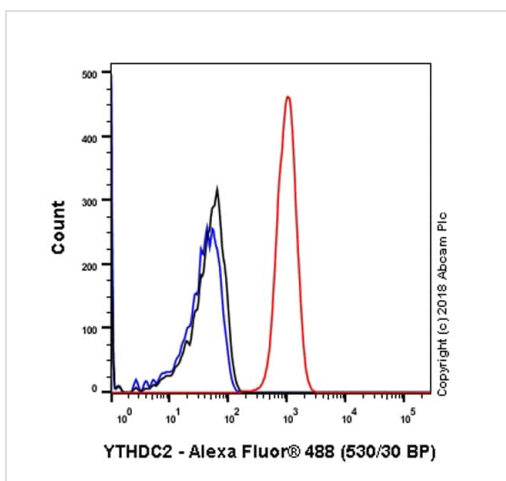


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling YTHDC2 with ab220160 at 1/500 dilution (1.19 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Cytoplasmic staining on human testis (PMID:28380054). Counterstained with Hematoxylin.

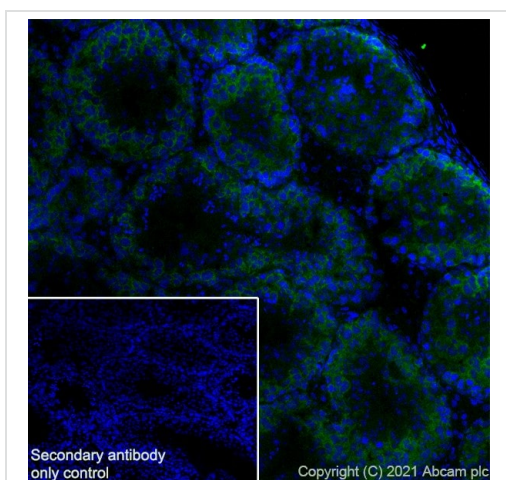
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



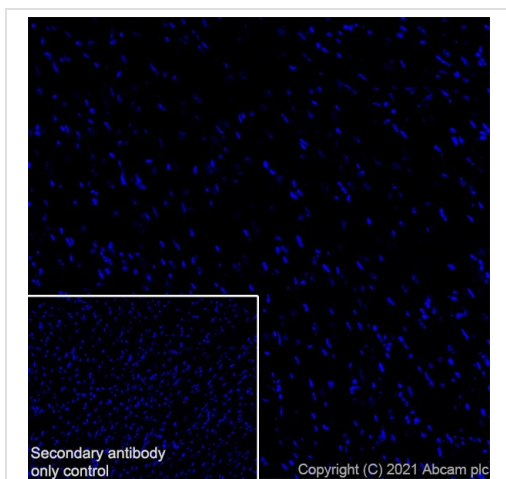
Flow Cytometry (Intracellular) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cells labelling YTHDC2 with ab220160 at 1/600 (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). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Frozen sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

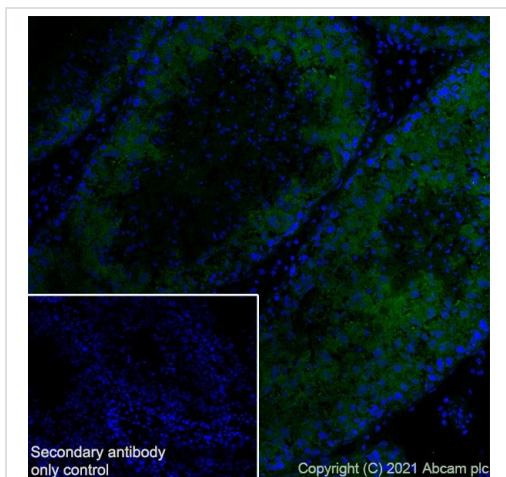
Immunohistochemical analysis of 4% paraformaldehyde fixed, 0.2% Triton X-100 permeabilised mouse testis tissue labeling YTHDC2 with ab220160 at 1/50 dilution (11 ug/mL). Followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (2 ug/mL). Showing cytoplasmic staining on mouse testis. Nuclear counterstain: DAPI.



Immunohistochemistry (Frozen sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

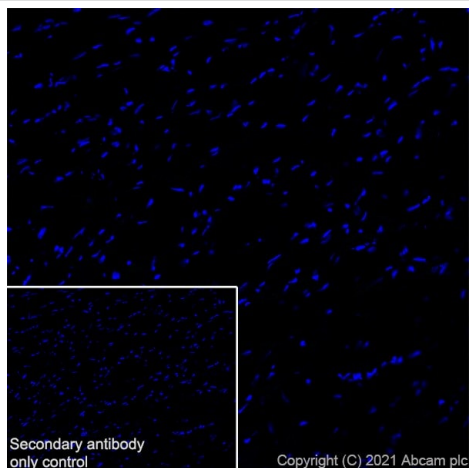
Negative control: (PMID: 29087293)

Immunohistochemical analysis of 4% paraformaldehyde fixed, 0.2% Triton X-100 permeabilised mouse heart tissue labeling YTHDC2 with ab220160 at 1/50 dilution (11 ug/mL). Followed by [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (2 ug/mL). No staining observed on mouse heart. Nuclear counterstain: DAPI.



Immunohistochemistry (Frozen sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Immunohistochemical analysis of 4% paraformaldehyde fixed, 0.2% Triton X-100 permeabilised rat testis tissue labeling YTHDC2 with ab220160 at 1/50 dilution (11 ug/mL). Followed by [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (2 ug/mL). Showing cytoplasmic staining on rat testis. Nuclear counterstain: DAPI.



Negative control: (PMID: 29087293)

Immunohistochemical analysis of 4% paraformaldehyde fixed, 0.2% Triton X-100 permeabilised rat heart tissue labeling YTHDC2 with ab220160 at 1/50 dilution (11 ug/mL). Followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (2 ug/mL). No staining observed on rat heart. Nuclear counterstain: DAPI.

Immunohistochemistry (Frozen sections) - Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-YTHDC2 antibody [EPR21820-49] (ab220160)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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