# abcam

## Product datasheet

## Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free ab275037



#### 12 Images

#### Overview

**Product name** Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free

**Description** Rabbit monoclonal [EPR23544-19] to YTHDF2 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: IP, ICC/IF, Flow Cyt (Intra), IHC-P, WB

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, LNCaP, MEF and PC-12 whole cell lysates; His-tagged human YTHDF2 recombinant

> protein. IHC-P: Human testis tissue; Mouse testis tissue; Rat testis tissue. ICC/IF: HeLa and NIH/3T3 cells. Flow Cyt (intra): HeLa and NIH/3T3 cells. IP: HeLa and NIH/3T3 whole cell lysates.

General notes ab275037 is the carrier-free version of ab246514.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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 production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

1

## **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer Constituent: PBS

Carrier free Yes

**Purity** Protein A purified

ClonalityMonoclonalClone numberEPR23544-19

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab275037 in the following tested applications.

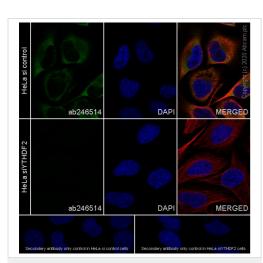
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 62 kDa (predicted molecular weight: 62 kDa).

## **Target**

Sequence similarities Contains 1 YTH domain.

#### **Images**



Immunocytochemistry/ Immunofluorescence - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037)

ab 246514 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037)

This data was developed using <u>ab246514</u>, the same antibody clone in a different buffer formulation.

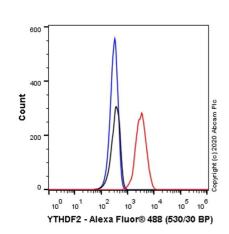
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial adenocarcinoma cell line) (siRNA control) and HeLa (siRNA YTHDF) cells labelling YTHDF2 with <a href="mailto:ab246514">ab246514</a> at 1/100 dilution, followed by <a href="mailto:ab150077">ab150077</a> Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in HeLa cell line transfected with scramble siRNA and reduced staining in HeLa cell line transfected with siRNA YTHDF2. <a href="mailto:ab195889">ab195889</a> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 dilution.

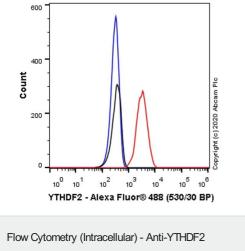
This data was developed using <u>ab246514</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilizedNIH/3T3 (Mouse embryo fibroblast cell line) cells labelling YTHDF2 with <u>ab246514</u> at 1/50 dilution, followed by <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in NIH/3T3 cell line. <u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - 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 <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 dilution.



antibody [EPR23544-19] - BSA and Azide free (ab275037)



This data was developed using ab246514, the same antibody

adenocarcinoma epithelial cell) cells labelling YTHDF2 with

monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody

A Goat anti rabbit lgG (Alexa Fluor®488, ab150077) at 1/2000

90% methanol permeabilized HeLa (Human cervix

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed,

ab246514 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit

clone in a different buffer formulation.

and secondary antibody) (Blue).

dilution was used as the secondary antibody.

YTHDF2 was immunoprecipitated from 0.35 mg NIH/3T3 (mouse embryonic fibroblast cell line) whole cell lysate with ab246514 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab246514 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.



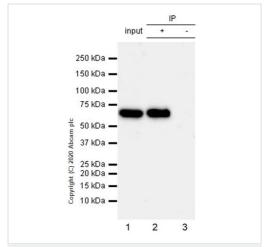
Lane 2: ab246514 IP in NIH/3T3 whole cell lysate

Lane 3: Rabbit monoclonal lgG (ab172730) instead of ab246514 in NIH/3T3 whole cell lysate

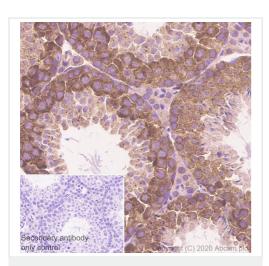
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 84 seconds.

Lysates were made freshly and used in IP test immediately to minimize protein degradation.

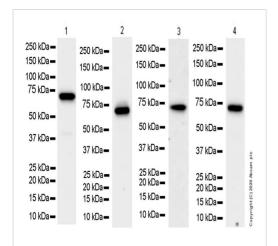


Immunoprecipitation - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-YTHDF2 antibody

[EPR23544-19] - BSA and Azide free (ab275037)



Western blot - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037)

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling YTHDF2 with <u>ab246514</u> at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Cytoplasmic staining in mouse testis (PMID: 30903744, PMID: 29103884). The section was incubated with <u>ab246514</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

**All lanes :** Anti-YTHDF2 antibody [EPR23544-19] ( $\underline{ab246514}$ ) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : LNCaP (human prostate carcinoma epithelial cell) whole cell lysate

Lane 3 : MEF (mouse embryonic fibroblast (immortalized)) whole cell lysate

Lane 4 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

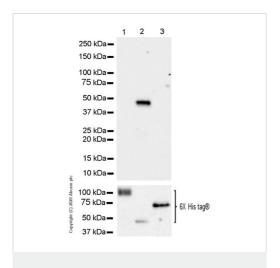
Predicted band size: 62 kDa
Observed band size: 62 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times: Lanes 1-2: 37 seconds; Lane 3: 180 seconds; Lane 4:37 seconds.

The molecular mass observed is consistent with the literature (PMID: 28104805).

Lysates should be made freshly and used in WB immediately to minimize protein degradation.



Western blot - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037) **All lanes**: Anti-YTHDF2 antibody [EPR23544-19] (ab246514) at 1/5000 dilution

**Lane 1 :** LIF-His-tagged human YTHDF1 recombinant protein, 10 ng

Lane 2: His-tagged human YTHDF2 recombinant protein, 10 ng
Lane 3: His-tagged human YTHDF3 recombinant protein, 10 ng

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

**Predicted band size:** 62 kDa **Observed band size:** 62 kDa

This data was developed using <u>ab246514</u>, the same antibody clone in a different buffer formulation.

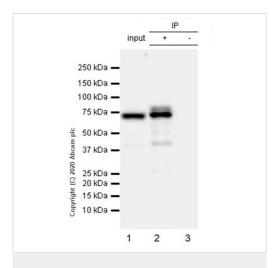
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 59 seconds.

These rec proteins were made in house.

LIF-His-tagged human YTHDF1 recombinant protein was expressed from a mammalian - HEK-293 expression system. His-tagged human YTHDF2 recombinant protein is extracts of E.coli expressing YTHDF2.

His-tagged human YTHDF3 recombinant protein is extracts of E.coli expressing YTHDF3.



Immunoprecipitation - Anti-YTHDF2 antibody
[EPR23544-19] - BSA and Azide free (ab275037)

YTHDF2 was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell line) whole cell lysate with <a href="mailto:ab246514">ab246514</a> at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using <a href="mailto:ab246514">ab246514</a> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<a href="mailto:ab131366">ab131366</a>) was used at 1/5000 dilution.

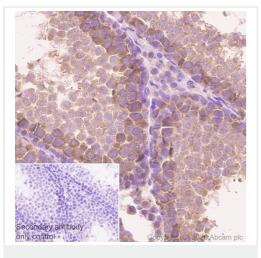
Lane 1: HeLa whole cell lysate 10 ug

Lane 2: ab246514 IP in HeLa whole cell lysate

**Lane 3:** Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab246514</u> in HeLa whole cell lysate

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

Exposure time: 10 seconds.



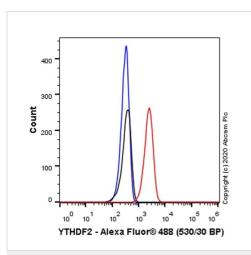
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-YTHDF2 antibody
[EPR23544-19] - BSA and Azide free (ab275037)

This data was developed using <u>ab246514</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling YTHDF2 with <u>ab246514</u> at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Cytoplasmic staining in rat testis (PMID: 30903744, PMID: 29103884). The section was incubated with <u>ab246514</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

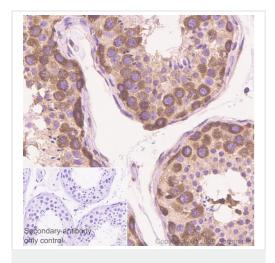
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-YTHDF2 antibody [EPR23544-19] - BSA and Azide free (ab275037)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labelling YTHDF2 with <a href="mailto:ab246514">ab246514</a> at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (<a href="mailto:ab172730">ab172730</a>) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup>488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-YTHDF2 antibody

[EPR23544-19] - BSA and Azide free (ab275037)

This data was developed using <u>ab246514</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling YTHDF2 with <u>ab246514</u> at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Cytoplasmic staining in human testis (PMID: 30903744, PMID: 29103884). The section was incubated with <u>ab246514</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors