

Product datasheet

Anti-ATAD2 antibody [EPR12730] ab176319

KO **VALIDATED** Recombinant RabMAB

[2 References](#) [6 Images](#)

Overview

Product name	Anti-ATAD2 antibody [EPR12730]
Description	Rabbit monoclonal [EPR12730] to ATAD2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF Unsuitable for: IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human ATAD2 aa 50-150 (Cysteine residue). The exact sequence is proprietary. Database link: Q6PL18
Positive control	WB: HeLa, MCF-7, T47-D and Saos-2 cell lysates. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells.
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> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</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: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR12730
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab176319 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

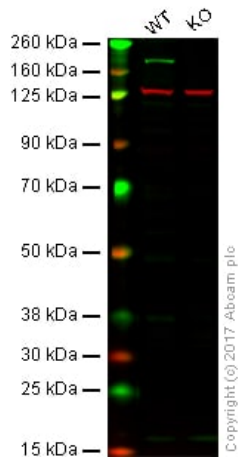
Application	Abreviews	Notes
Flow Cyt (Intra)		1/60.
WB		1/1000 - 1/10000. Predicted molecular weight: 159 kDa.
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for IHC-P or IP.

Target

Function	May be a transcriptional coactivator of the nuclear receptor ESR1 required to induce the expression of a subset of estradiol target genes, such as CCND1, MYC and E2F1. May play a role in the recruitment or occupancy of CREBBP at some ESR1 target gene promoters. May be required for histone hyperacetylation. Involved in the estrogen-induced cell proliferation and cell cycle progression of breast cancer cells.
Tissue specificity	Highly expressed in estrogen receptor positive breast tumors and in osteosarcoma tumors.
Sequence similarities	Belongs to the AAA ATPase family. Contains 1 bromo domain.
Cellular localization	Nucleus.

Images



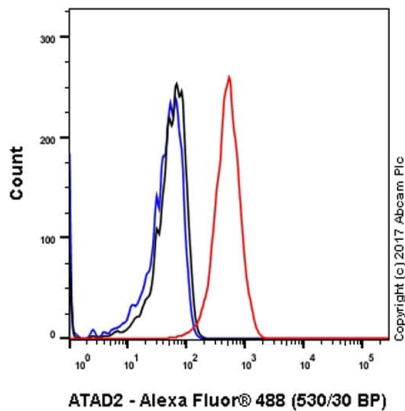
Western blot - Anti-ATAD2 antibody [EPR12730] (ab176319)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: ATAD2 knockout HAP1 whole cell lysate (20 µg)

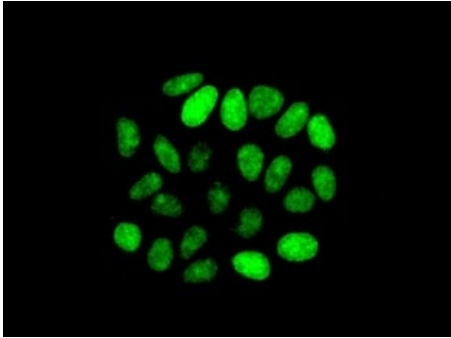
Lanes 1 - 2: Merged signal (red and green). Green - ab176319 observed at 200 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab176319 was shown to specifically react with ATAD2 in wild type cells as signal was lost in ATAD2 knockout cells. Wild-type and ATAD2 knockout samples were subjected to SDS-PAGE. Ab176319 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 500 dilution and 1/20000 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 1/20000 dilution for 1 hour at room temperature before imaging.



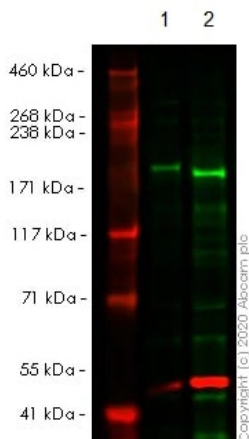
Flow Cytometry (Intracellular) - Anti-ATAD2 antibody [EPR12730] (ab176319)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling ATAD2 (red) with ab176319 at a 1/60 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (**ab172730**). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



Immunocytochemistry/ Immunofluorescence - Anti-ATAD2 antibody [EPR12730] (ab176319)

Immunofluorescent staining of HeLa cells labeling ATAD2 using ab176319 at a 1/100 dilution.



Western blot - Anti-ATAD2 antibody [EPR12730] (ab176319)

All lanes : Anti-ATAD2 antibody [EPR12730] (ab176319) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ATAD2 CRISPR/Cas9 edited HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

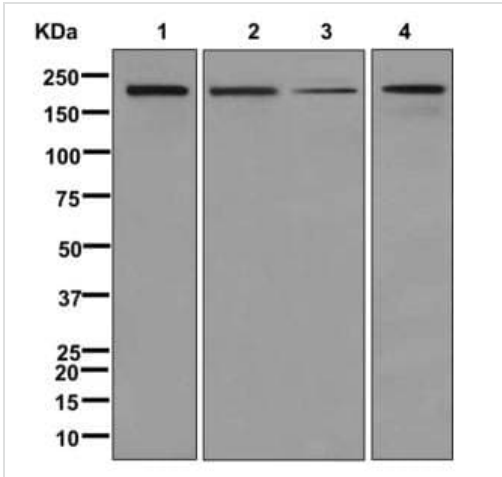
Predicted band size: 159 kDa

Observed band size: 200 kDa

Lanes 1-2: Merged signal (red and green). Green - ab176319 observed at 200 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) observed at 50 kDa.

ab176319 was shown to react with ATAD2 in wild-type HeLa cells in western blot. The band observed in CRISPR/Cas9 edited cell line [ab264957](#) (CRISPR/Cas9 edited cell lysate [ab257359](#)) lane below 200kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type HeLa and ATAD2 CRISPR/Cas9 edited HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab176319 and Anti-alpha

Tubulin antibody [DM1A] - Loading Control (**ab7291**) were incubated overnight at 4°C at a 1 in 1000 dilution and a 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.



Western blot - Anti-ATAD2 antibody [EPR12730] (ab176319)

All lanes : Anti-ATAD2 antibody [EPR12730] (ab176319) at 1/1000 dilution

Lane 1 : HeLa lysate

Lane 2 : MCF-7 lysate

Lane 3 : T47-D lysate

Lane 4 : Saos-2 lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 159 kDa

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-ATAD2 antibody [EPR12730] (ab176319)

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

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