abcam

Product datasheet

Anti-Drosha antibody [EPR12794] ab183732

KO VALIDATED   Recombinant   RabMAb

★★★★★ **2 Abreviews**   **9 References**   4 Images

Overview

Product name	Anti-Drosha antibody [EPR12794]
Description	Rabbit monoclonal [EPR12794] to Drosha
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, HEK-293T and HeLa cell lysates. IHC-P: Human lung adenocarcinoma tissue. Flow Cyt: Jurkat cells.
General notes	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**.

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: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR12794

Isotype	IgG

Applications

Our **Abpromise guarantee** covers the use of ab183732 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
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★☆ (1)	1/10000 - 1/50000. Detects a band of approximately 159 kDa (predicted molecular weight: 159 kDa).

Application notes   Is unsuitable for Flow Cyt or ICC/IF.

Target

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Function	Ribonuclease III double-stranded (ds) RNA-specific endoribonuclease that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in the nucleus. Within the microprocessor complex, DROSHA cleaves the 3' and 5' strands of a stem-loop in pri-miRNAs (processing center 11 bp from the dsRNA-ssRNA junction) to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. Involved also in pre-rRNA processing. Cleaves double-strand RNA and does not cleave single-strand RNA. Involved in the formation of GW bodies.
Tissue specificity	Ubiquitous.
Sequence similarities	Contains 1 DRBM (double-stranded RNA-binding) domain. Contains 2 RNase III domains.
Domain	The 2 RNase III domains form an intramolecular dimer where the domain 1 cuts the 3'strand while the domain 2 cleaves the 5'strand of pri-miRNAs, independently of each other.
Cellular localization	Nucleus. Nucleus > nucleolus. A fraction is translocated to the nucleolus during the S phase of the cell cycle. Localized in GW bodies (GWBs), also known as P-bodies.

Images
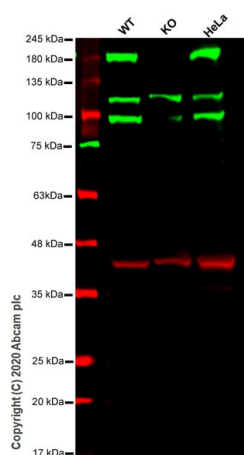
Western blot - Anti-Drosha antibody [EPR12794] (ab183732)

All lanes : Anti-Drosha antibody [EPR12794] (ab183732) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : DROSHA knockout HEK-293T cell lysate

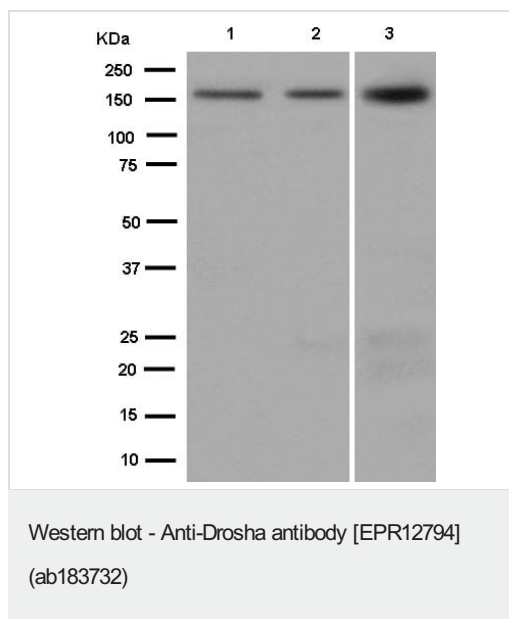**Lane 3 :** HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 159 kDa

Observed band size: 159 kDa

Lanes 1-3: Merged signal (red and green). Green - ab183732 observed at 159 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab183732 Anti-Drosha antibody [EPR12794] was shown to specifically react with Drosha in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266217** (knockout cell lysate **ab257171**) was used. Wild-type and Drosha knockout samples were subjected to SDS-PAGE. ab183732 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 10000 dilution for 1 hour at room temperature before imaging.

Western blot - Anti-Drosha antibody [EPR12794]
(ab183732)

All lanes : Anti-Drosha antibody [EPR12794] (ab183732) at
1/50000 dilution

Lane 1 : Jurkat cell lysate

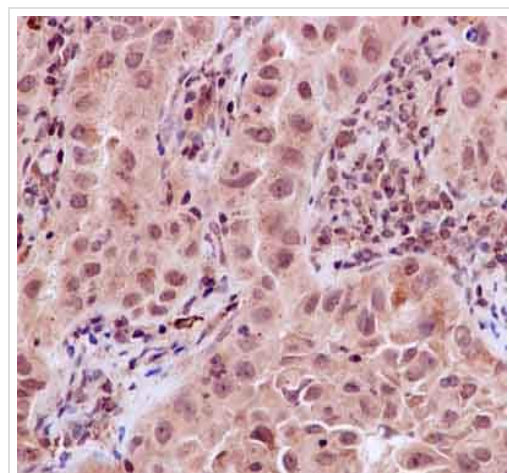**Lane 2 :** 293 cell lysate

Lane 3 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at
1/1000 dilution

Predicted band size: 159 kDa

Observed band size: 159 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Drosha antibody
[EPR12794] (ab183732)

Immunohistochemical analysis of paraffin-embedded Human lung
adenocarcinoma tissue labeling Drosha with ab183732 at 1/100
dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter
stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9
before commencing with IHC staining protocol.

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-Drosha antibody [EPR12794] (ab183732)

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

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