

# Anti-Drosha antibody [EPR12794] - BSA and Azide free ab227460

KO VALIDATED

Recombinant

RabMAb

[1 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-Drosha antibody [EPR12794] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR12794] to Drosha - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Jurkat, HEK-293T, and HeLa cell lysates. IHC-P: Human lung adenocarcinoma tissue.
<b>General notes</b>	<p>ab227460 is the carrier-free version of <a href="#">ab183732</a>.</p> <p>Our <b>carrier-free</b> 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.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS

<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12794
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab227460 in the following tested applications.

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

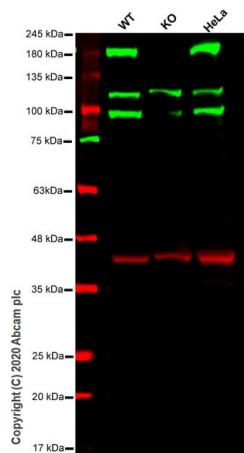
Application	Abreviews	Notes
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 159 kDa (predicted molecular weight: 159 kDa).

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

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Ubiquitous.
<b>Sequence similarities</b>	Contains 1 DRBM (double-stranded RNA-binding) domain. Contains 2 RNase III domains.
<b>Domain</b>	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.
<b>Cellular localization</b>	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] - BSA and Azide free (ab227460)

**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.

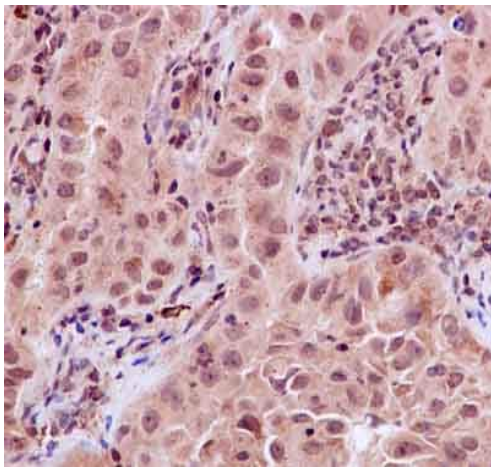
**Predicted band size:** 159 kDa

**Observed band size:** 159 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab183732**).

**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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Drosha antibody [EPR12794] - BSA and Azide free (ab227460)

This IHC data was generated using the same anti-Drosha antibody clone, EPR12794, in a different buffer formulation (cat# **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] - BSA and Azide free (ab227460)

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

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