

Product datasheet

Anti-Dicer antibody [4A6] ab82539

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

Overview

Product name	Anti-Dicer antibody [4A6]
Description	Mouse monoclonal [4A6] to Dicer
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to the central region of Dicer.
Positive control	Normal human ovary. Human placental tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None
Clonality	Monoclonal
Clone number	4A6
Isotype	IgG1

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab82539 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
WB		1/100 - 1/500. Predicted molecular weight: 217 kDa.
IHC-P		1/50 - 1/200. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol.

Target

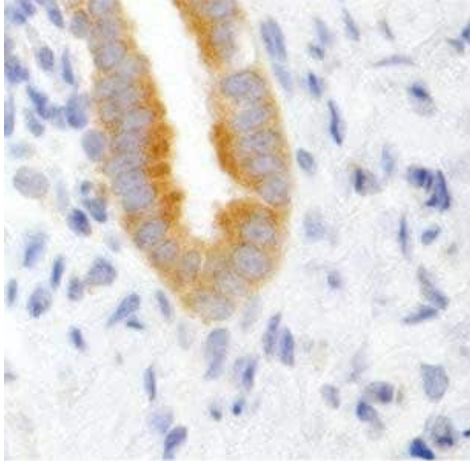
Function Double-stranded RNA (dsRNA) endoribonuclease playing a central role in short dsRNA-mediated post-transcriptional gene silencing. Cleaves naturally occurring long dsRNAs and short hairpin pre-microRNAs (miRNA) into fragments of twenty-one to twenty-three nucleotides with 3' overhang of two nucleotides, producing respectively short interfering RNAs (siRNA) and mature microRNAs. SiRNAs and miRNAs serve as guide to direct the RNA-induced silencing complex (RISC) to complementary RNAs to degrade them or prevent their translation. Gene silencing mediated by siRNAs, also called RNA interference, controls the elimination of transcripts from mobile and repetitive DNA elements of the genome but also the degradation of exogenous RNA of viral origin for instance. The miRNA pathway on the other side is a mean to specifically regulate the expression of target genes.

Involvement in disease Pleuropulmonary blastoma
 Goiter multinodular 1, with or without Sertoli-Leydig cell tumors
 Rhabdomyosarcoma, embryonal, 2
 DICER1 mutations have been found in uterine cervix embryonal rhabdomyosarcoma, primitive neuroectodermal tumor, Wilms tumor, pulmonary sequestration and juvenile intestinal polyp (PubMed:21882293). Somatic missense mutations affecting the RNase IIIb domain of DICER1 are common in non-epithelial ovarian tumors. These mutations do not abolish DICER1 function but alter it in specific cell types, a novel mechanism through which perturbation of microRNA processing may be oncogenic (PubMed:22187960).

Sequence similarities Belongs to the helicase family. Dicer subfamily.
 Contains 1 Dicer dsRNA-binding fold domain.
 Contains 1 DRBM (double-stranded RNA-binding) domain.
 Contains 1 helicase ATP-binding domain.
 Contains 1 helicase C-terminal domain.
 Contains 1 PAZ domain.
 Contains 2 RNase III domains.

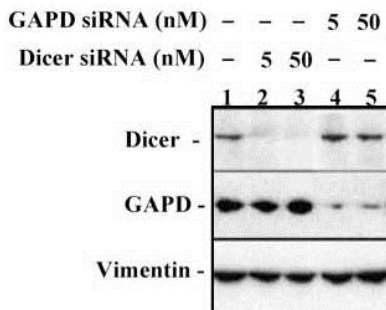
Cellular localization Cytoplasm.

Images



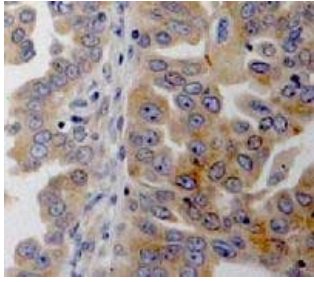
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dicer antibody [4A6] (ab82539)

ab82539, at 1/20 dilution, staining Dicer in normal human ovary by Immunohistochemistry using paraffin-embedded tissue.



Western blot - Anti-Dicer antibody [4A6] (ab82539)

ab82539 has been verified by siRNA target validation. The figure shows the elimination of the antigen band on western after treatment of cells with siRNA against human Dicer. No effect is seen on treatment with an irrelevant siRNA against GAPDH.



ab82539, at 1/20 dilution, staining Dicer in human lung tumor by Immunohistochemistry using paraffin-embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dicer antibody [4A6] (ab82539)

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 <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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