


Anti-DGCR8 antibody ab90579

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

Overview

Product name	Anti-DGCR8 antibody
Description	Rabbit polyclonal to DGCR8
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Chimpanzee, Rhesus monkey, Gorilla, Orangutan 
Immunogen	Synthetic peptide corresponding to a region between residue 1 and 50 of Human DGCR8 (NP_073557.3).
Positive control	Whole cell lysate from HeLa cells and 293T cells.
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. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: Tris buffered saline, 0.1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab90579 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		1/2000 - 1/10000. Predicted molecular weight: 86 kDa.
IP		Use at 2-5 µg/mg of lysate.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Component of the microprocessor complex that acts as a RNA- and heme-binding protein 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, DGCR8 function as a molecular anchor necessary for the recognition of pri-miRNA at dsRNA-ssRNA junction and directs DROSHA to cleave 11 bp away from the junction to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. The heme-bound DGCR8 dimer binds pri-miRNAs as a cooperative trimer (of dimers) and is active in triggering pri-miRNA cleavage, whereas the heme-free DGCR8 monomer binds pri-miRNAs as a dimer and is much less active. Both double-stranded and single-stranded regions of a pri-miRNA are required for its binding. Involved in the silencing of embryonic stem cells self-renewal.

Tissue specificity

Ubiquitously expressed.

Sequence similarities

Contains 2 DRBM (double-stranded RNA-binding) domains.
Contains 1 WW domain.

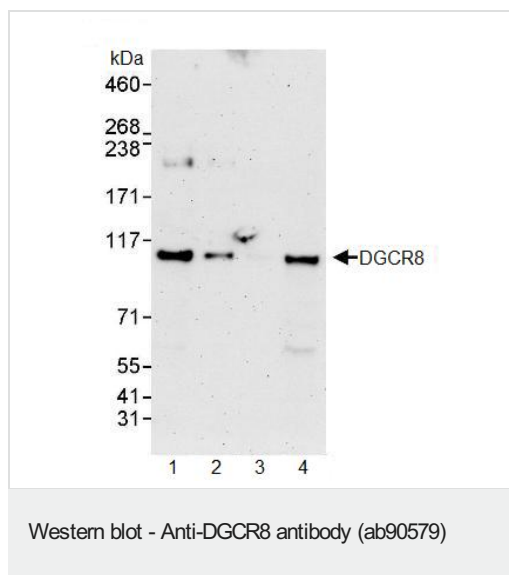
Domain

Both DRBM domains are required for efficient binding to pri-miRNA. The region between residues 276 and 498 has an autoinhibitory function on pri-miRNA processing activity.

Cellular localization

Nucleus. Nucleus > nucleolus. Colocalizes with nucleolin and DROSHA in the nucleolus. Mostly detected in the nucleolus as electron-dense granular patches around the fibrillar center (FC) and granular component (GC). Also detected in the nucleoplasm as small foci adjacent to splicing speckles near the chromatin structure. Localized with DROSHA in GW bodies (GWBs), also known as P-bodies.

Images



All lanes : Anti-DGCR8 antibody (ab90579) at 0.04 µg/ml

Lane 1 : Whole cell lysate from HeLa cells at 50 µg

Lane 2 : Whole cell lysate from HeLa cells at 15 µg

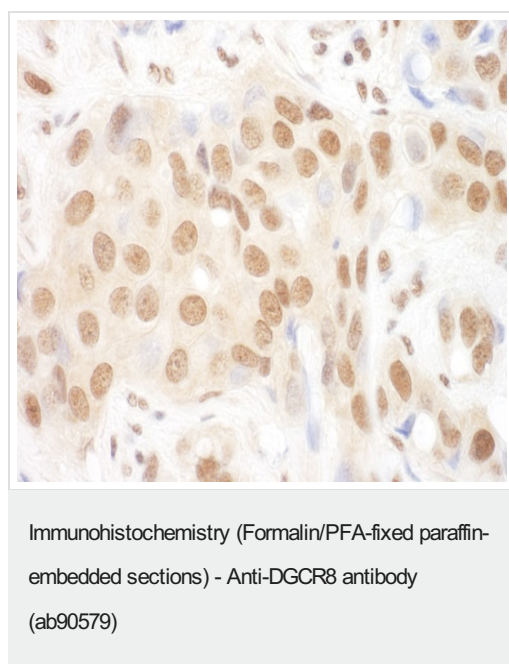
Lane 3 : Whole cell lysate from HeLa cells at 5 µg

Lane 4 : Whole cell lysate from 293T cells at 50 µg

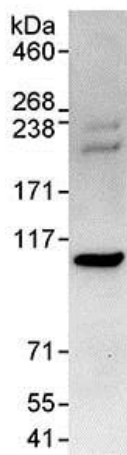
Developed using the ECL technique.

Predicted band size: 86 kDa

Exposure time: 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling DGCR8 with ab90579 at 1/200 (1µg/ml). Detection: DAB.



Immunoprecipitation - Anti-DGCR8 antibody
(ab90579)

Detection of Human DGCR8 in Immunoprecipitates of Whole cell lysate from HeLa cells (1 mg for IP, 20% of IP loaded) using ab90579 at 3 µg/mg lysate for IP and at 1 µg/ml for subsequent Western blot detection.

Detection: Chemiluminescence with an exposure time of 30 seconds.

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

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