abcam

Product datasheet

Anti-DGCR8 antibody [EPR18757] ab191875

重组 RabMAb

★★★★★ 2 Abreviews 25 References 9 图像

概述

产品名称	Anti-DGCR8抗体[EPR18757]
描述	兔单克隆抗体[EPR18757] to DGCR8
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, ICC/IF, IP
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, HEK-293, WEHI-3, Neuro-2a, PC-12 and NIH/3T3 whole cell lysates; Human fetal kidney lysate; Mouse brain, mouse testis and rat brain lysates. ICC/IF: HeLa and Jurkat cells. IP: HEK-293 whole cell lysate.
常规说明	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**.

性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR18757

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab191875于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/1000.
WB	★★★★★ (2)	1/1000. Detects a band of approximately 100 kDa (predicted molecular weight: 86 kDa).
ICC/IF		1/1000.
IP		1/60.

靶标

功能 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 form 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.

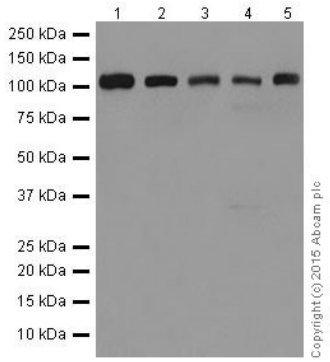
组织特异性 Ubiquitously expressed.

序列相似性 Contains 2 DRBM (double-stranded RNA-binding) domains.
Contains 1 WW domain.

结构域 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.

细胞定位 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.

图片



Western blot - Anti-DGCR8 antibody [EPR18757] (ab191875)

All lanes : Anti-DGCR8 antibody [EPR18757] (ab191875) at 1/1000 dilution

Lane 1 : HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate
Lane 2 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate
Lane 3 : WEHI-3 (Mouse leukemia cell line) whole cell lysate
Lane 4 : Neuro-2a (Mouse neuroblastoma cells) whole cell lysate
Lane 5 : Mouse testis lysate

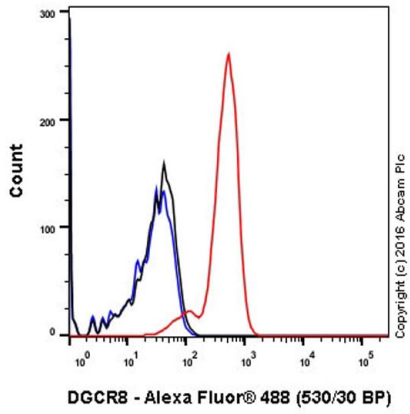
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 86 kDa
Observed band size: 100 kDa

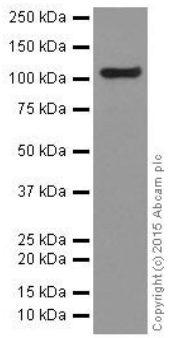
Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-DGCR8 antibody [EPR18757] (ab191875)

Intracellular Flow Cytometry analysis of Jurkat (human acute T cell leukemia) labelling DGCR8 with purified ab191875 at 1/1000 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Alexa Fluor® 488 goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-DGCR8 antibody [EPR18757] (ab191875)

Anti-DGCR8 antibody [EPR18757] (ab191875) at 1/1000 dilution + Human fetal kidney lysate at 10 µg

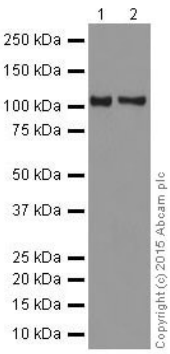
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/50000 dilution

Predicted band size: 86 kDa
Observed band size: 100 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-DGCR8 antibody [EPR18757] (ab191875)

All lanes : Anti-DGCR8 antibody [EPR18757] (ab191875) at 1/1000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

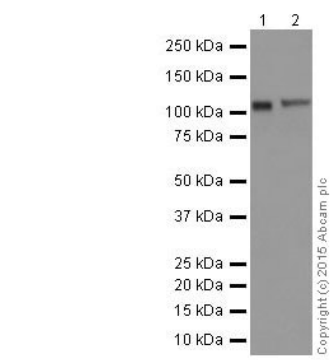
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 86 kDa
Observed band size: 100 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-DGCR8 antibody [EPR18757] (ab191875)

All lanes : Anti-DGCR8 antibody [EPR18757] (ab191875) at 1/1000 dilution

Lane 1 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate
Lane 2 : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

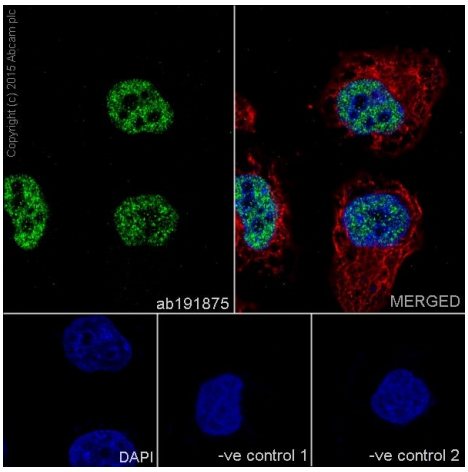
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 86 kDa
Observed band size: 100 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-DGCR8 antibody [EPR18757] (ab191875)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling DGCR8 with ab191875 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

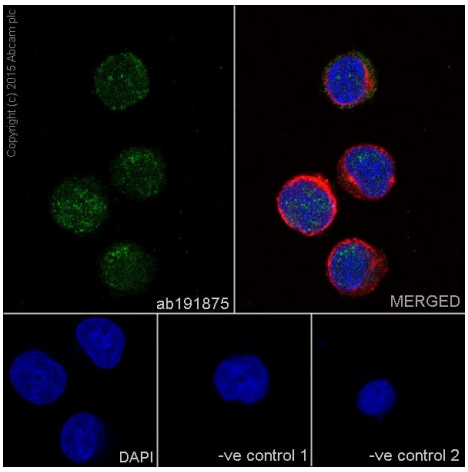
Confocal image showing nuclear staining on HeLa cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-
-ve control 1: ab191875 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.
-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG

H&L) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-DGCR8 antibody [EPR18757] (ab191875)

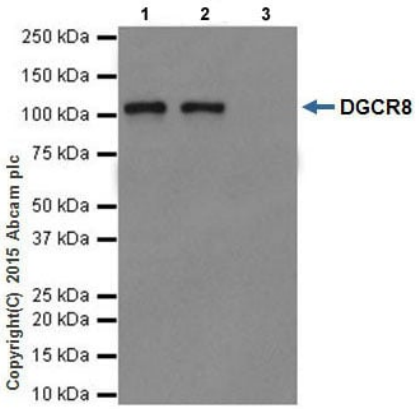
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling DGCR8 with ab191875 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear and weakly cytoplasmic staining on Jurkat cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-
-ve control 1: ab191875 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.
-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Immunoprecipitation - Anti-DGCR8 antibody [EPR18757] (ab191875)

DGCR8 was immunoprecipitated from 1mg of HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate with ab191875 at 1/60 dilution.

Western blot was performed from the immunoprecipitate using ab191875 at 1/1000 dilution.

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

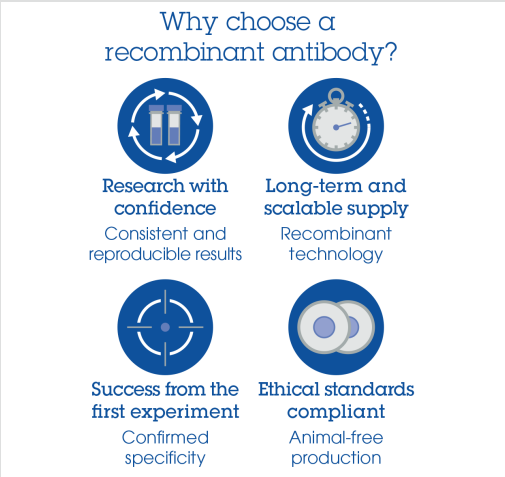
Lane 1: HEK-293 whole cell lysate 10ug (Input).

Lane 2: ab191875 IP in HEK-293 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab191875 in HEK-293 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.



Anti-DGCR8 antibody [EPR18757] (ab191875)

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.cn/abpromise** or contact our technical team.

Terms and conditions

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