

## Product datasheet

# Anti-Gankyrin antibody [EPR14455] $\alpha$ b182576

**KO VALIDATED** Recombinant RabMAB

★★★★★ 2 Abreviews 7 References 7 Images

### Overview

<b>Product name</b>	Anti-Gankyrin antibody [EPR14455]
<b>Description</b>	Rabbit monoclonal [EPR14455] to Gankyrin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	HeLa, HepG2, K562 and 293 cell lysate; Human infiltrating duct carcinoma of breast and lung adenocarcinoma tissues; 293 cells; K562 cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR14455

Isotype

IgG

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab182576 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
Flow Cyt (Intra)		1/80. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/100.
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	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 24 kDa (predicted molecular weight: 24 kDa).

## Target

### Function

Acts as a chaperone during the assembly of the 26S proteasome, specifically of the PA700/19S regulatory complex (RC). In the initial step of the base subcomplex assembly is part of an intermediate PSMD10:PSMC4:PSMC5:PAAF1 module which probably assembles with a PSMD5:PSMC2:PSMC1:PSMD2 module.

Acts as an proto-oncoprotein by being involved in negative regulation of tumor suppressors RB1 and p53/TP53. Overexpression is leading to phosphorylation of RB1 and proteasomal degradation of RB1. Regulates CDK4-mediated phosphorylation of RB1 by competing with CDKN2A for binding with CDK4. Facilitates binding of MDM2 to p53/TP53 and the mono- and polyubiquitination of p53/TP53 by MDM2 suggesting a function in targeting the TP53:MDM2 complex to the 26S proteasome. Involved in p53-independent apoptosis. Involved in regulation of NF-kappa-B by retaining it in the cytoplasm. Binds to the NF-kappa-B component RELA and accelerates its XPO1/CRM1-mediated nuclear export.

### Tissue specificity

Overexpressed in hepatocellular carcinomas.

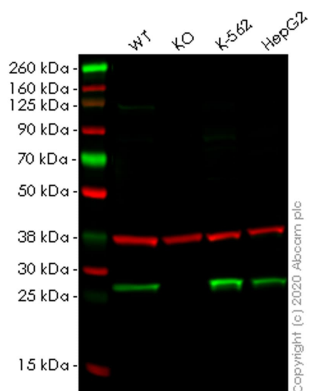
### Sequence similarities

Contains 7 ANK repeats.

### Cellular localization

Cytoplasm. Nucleus.

## Images



Western blot - Anti-Gankyrin antibody [EPR14455] (ab182576)

**All lanes :** Anti-Gankyrin antibody [EPR14455] (ab182576) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** PSMD10 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 3 :** K562 (Human chronic myelogenous leukemia lymphoblast cell line) whole cell lysate

**Lane 4 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

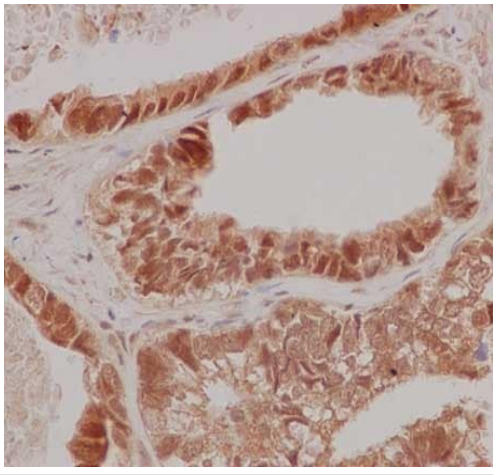
**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

**Predicted band size:** 24 kDa

**Observed band size:** 24 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab182576 observed at 24 kDa. Red - loading control ab8245 observed at 36 kDa.

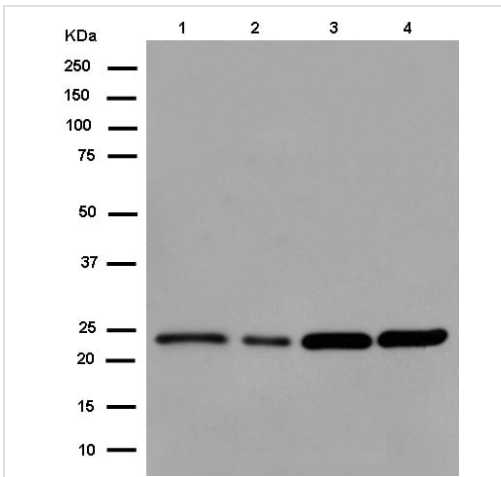
ab182576 Anti-Gankyrin antibody [EPR14455] was shown to specifically react with Gankyrin in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265680 (knockout cell lysate ab258146) was used. Wild-type and Gankyrin knockout samples were subjected to SDS-PAGE. ab182576 and Anti-GAPDH 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 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gankyrin antibody [EPR14455] (ab182576)

Immunohistochemical analysis of paraffin-embedded Human lung adenocarcinoma tissue labeling Gankyrin using ab182576 at 1/100 dilution. A Ready to use HRP Polymer for Rabbit IgG was used as secondary. Counterstain: Hematoxylin.

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



Western blot - Anti-Gankyrin antibody [EPR14455] (ab182576)

**All lanes** : Anti-Gankyrin antibody [EPR14455] (ab182576) at 1/10000 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : HepG2 cell lysate

**Lane 3** : K562 cell lysate

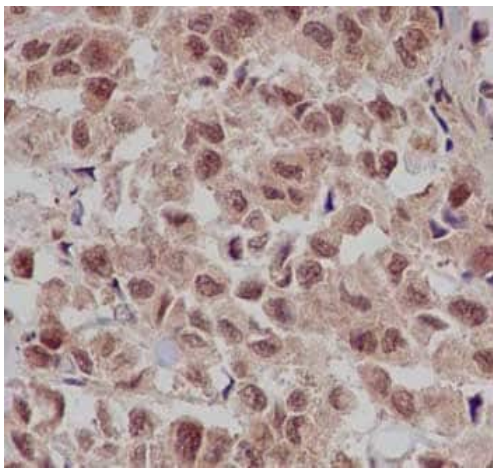
**Lane 4** : 293 cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

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

**Predicted band size:** 24 kDa

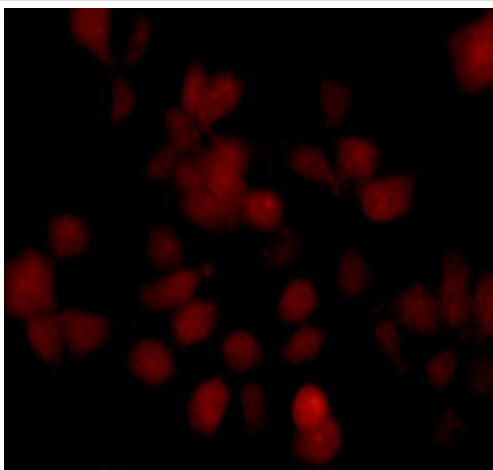


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gankyrin antibody [EPR14455] (ab182576)

Immunohistochemical analysis of paraffin-embedded human infiltrating duct carcinoma of breast tissue labeling Gankyrin using ab182576 at 1/100 dilution. A ready to use HRP Polymer for Rabbit IgG was used as secondary.

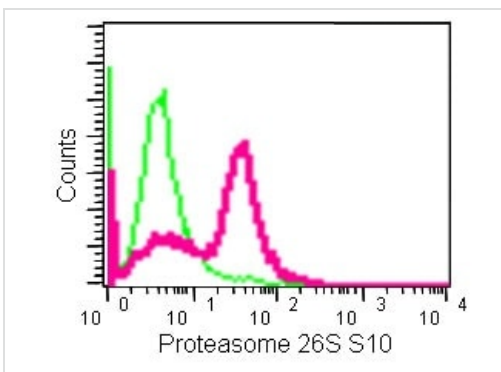
Counterstain: Hematoxylin.

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



Immunocytochemistry/ Immunofluorescence - Anti-Gankyrin antibody [EPR14455] (ab182576)

Immunofluorescence analysis of 293 cells labeling Gankyrin using ab182576 at 1/100 dilution. A Goat anti rabbit IgG (Alexa Fluor555) at 1/200 dilution was used as secondary antibody. Cells were fixed with 4% paraformaldehyde.



Flow Cytometry (Intracellular) - Anti-Gankyrin antibody [EPR14455] (ab182576)

Intracellular Flow Cytometry analysis of K562 cells labeling Gankyrin using ab182576 at 1/80 dilution. A Goat anti rabbit IgG (FITC) at 1/150 dilution was used as secondary antibody. Cells were fixed with 2% paraformaldehyde. Isotype control: Rabbit monoclonal IgG.

### 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-Gankyrin antibody [EPR14455] (ab182576)

**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