abcam

Product datasheet

Anti-Gankyrin antibody [EPR14455] ab182576





★★★★★ 2 Abreviews 11 References 7 Images

Overview

Product name Anti-Gankyrin antibody [EPR14455]

Description Rabbit monoclonal [EPR14455] to Gankyrin

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF, IHC-P, WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control HeLa, HepG2, K562 and 293 cell lysate; Human infiltrating duct carcinoma of breast and lung

adenocarcinoma tissues; 293 cells; K562 cells.

General notes 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**.

Properties

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR14455

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> 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. ab172730 - Rabbit monoclonal lgG, 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.

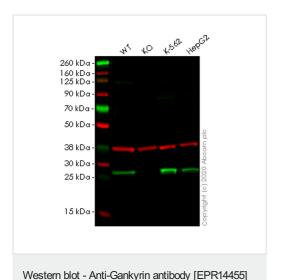
Sequence similarities

Contains 7 ANK repeats.

Cellular localization

Cytoplasm. Nucleus.

Images



(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.

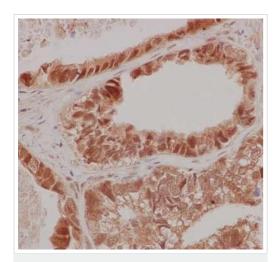
Secondary

All lanes : Goat anti-Rabbit lgG 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 <u>ab8245</u> observed at 36 kDa.

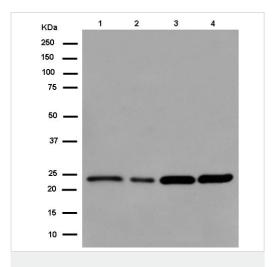
ab182576 Anti-Gankyrin antibody [EPR14455] was shown to specifically react with Gankyrin in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265680 (knockout cell lysate ab258146) was used. Wild-type and Gankyrin knockout samples were subjected to SDS-PAGE. ab182576 and Anti-GAPDH antibody [6C5] - Loading Control (ab82576 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 lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG 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 paraffinembedded 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 lgG 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

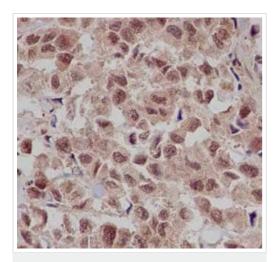
Lane 3 : K562 cell lysate
Lane 4 : 293 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 24 kDa

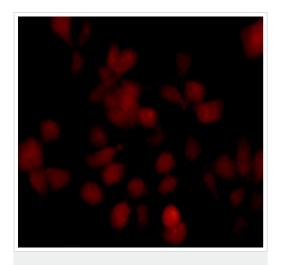


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Gankyrin antibody
[EPR14455] (ab182576)

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 lgG was used as secondary.

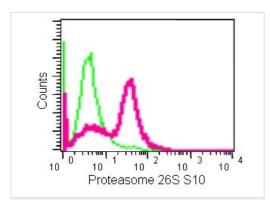
Counterstain: Hematoxylin.

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



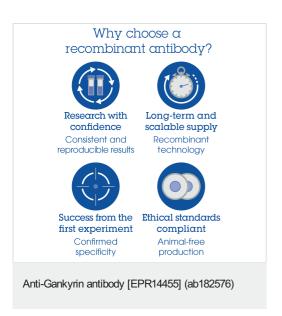
Immunocytochemistry/ Immunofluorescence - Anti-Gankyrin antibody [EPR14455] (ab182576)

Immunofluorescence analysis of 293 cells labeling Gankyrin using ab182576 at 1/100 dilution. A Goat anti rabbit $\lg G$ (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% paraformal dehyde. Isotype control: Rabbit monoclonal IgG.



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