

Product datasheet

Anti-GATA2 antibody [EPR2822(2)] ab109241

KO VALIDATED

Recombinant

RabMAb

★★★★☆ 1 Abreviews 10 References 6 Images

Overview

Product name	Anti-GATA2 antibody [EPR2822(2)]
Description	Rabbit monoclonal [EPR2822(2)] to GATA2
Host species	Rabbit
Tested applications	Suitable for: ChIP, WB, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: bEnd.3, PC-12, HEK-293, and K562 whole cell lysates. Mouse placenta lysate; IP: K-562 whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2822(2)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109241 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
ChIP		Use at an assay dependent concentration.
WB		1/1000. Predicted molecular weight: 51 kDa. For unpurified use at 1/1000 - 1/10000.
IP		1/30. For unpurified use at 1/10 - 1/100.

Target

Function

Transcriptional activator which regulates endothelin-1 gene expression in endothelial cells. Binds to the consensus sequence 5'-AGATAG-3'.

Tissue specificity

Endothelial cells.

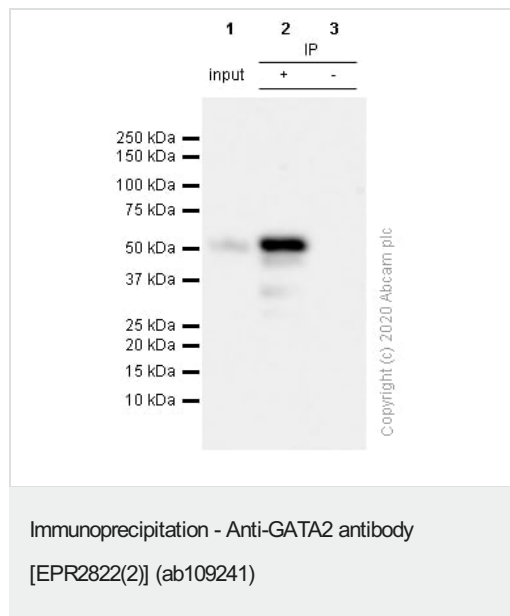
Sequence similarities

Contains 2 GATA-type zinc fingers.

Cellular localization

Nucleus.

Images



GATA2 was immunoprecipitated from 0.35 mg K-562 (Human chronic myelogenous leukemia lymphoblast) cell lysate 10 µg with ab109241 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab109241 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

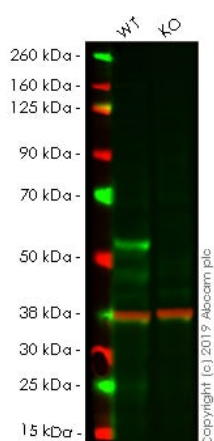
Lane 1: K-562 (Human chronic myelogenous leukemia lymphoblast) cell lysate 10 µg

Lane 2: ab109241 IP in K-562 cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab109241 in K562 cell lysate

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

Exposure time: 8 seconds



Western blot - Anti-GATA2 antibody [EPR2822(2)]
(ab109241)

All lanes : Anti-GATA2 antibody [EPR2822(2)] (ab109241) at 1 $\mu\text{g/ml}$

Lane 1 : Wild-type HEK-293 whole cell lysate

Lane 2 : GATA2 knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

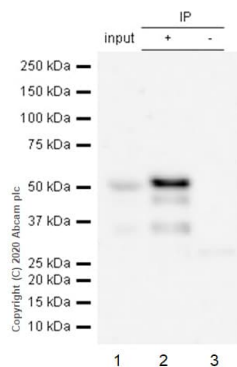
Lysates/proteins at 20 μg per lane.

Performed under reducing conditions.

Predicted band size: 51 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab109241 observed at 50 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab109241 was shown to recognize GATA2 in wild-type HEK-293 cells as signal was lost at the expected MW in GATA2 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and GATA2 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab109241 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 $\mu\text{g/ml}$ and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-GATA2 antibody
[EPR2822(2)] (ab109241)

Purified ab109241 at 1/30 dilution (2 µg) immunoprecipitating GATA2 in K-562 whole cell lysate.

Lane 1 (input): K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate 10 µg

Lane 2 (+): ab109241 + K-562 whole cell lysate.

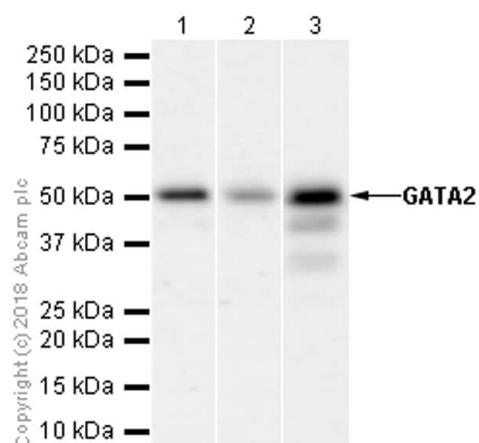
Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab109241 in K-562 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 51 kDa



Western blot - Anti-GATA2 antibody [EPR2822(2)]
(ab109241)

All lanes : Anti-GATA2 antibody [EPR2822(2)] (ab109241) at 1/1000 dilution (purified)

Lane 1 : bEnd.3 (Mouse brain endothelioma) whole cell lysate

Lane 2 : Mouse placenta lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

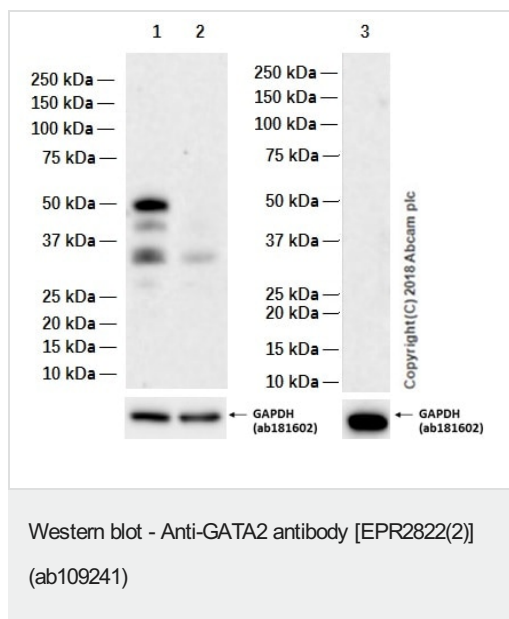
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 51 kDa

Observed band size: 51 kDa



All lanes : Anti-GATA2 antibody [EPR2822(2)] (ab109241) at 1/1000 dilution

Lane 1 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate prepared using 1% SDS hot lysis method

Lane 2 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate prepared using RIPA lysis method

Lane 3 : U-937 (Human histiocytic lymphoma monocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 51 kDa

Exposure time: 3 minutes

Blocking and diluting buffer: 5% NFDM/TBST.

The different result in K-562 is due to the lysates preparation method.

For Lysate preparation protocol, please refer to the protocol book in the protocol section and/or [here \(downloadable copy\)](#).

The expression profile observed in U-937 is consistent with the literature (PMID: 19212333).

Negative control: U-937 (PMID: 19212333)

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-GATA2 antibody [EPR2822(2)] (ab109241)

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

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