


Product datasheet

Anti-GALT antibody [EPR12555] ab178406

KO **VALIDATED** Recombinant RabMAB

[5 References](#) [5 Images](#)

Overview

Product name	Anti-GALT antibody [EPR12555]
Description	Rabbit monoclonal [EPR12555] to GALT
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide within Human GALT aa 50-150. The exact sequence is proprietary. Database link: P07902
Positive control	WB: HeLa, A549, K562, MDA-MB-435 and HepG2 whole cell lysate (ab7900); Human fetal brain and fetal liver lysates.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 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: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR12555
Isotype IgG

Applications

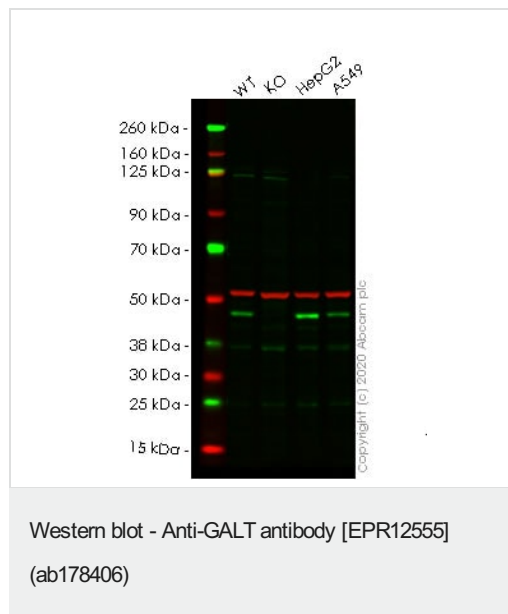
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab178406 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/5000. Predicted molecular weight: 43 kDa.
IP		1/10 - 1/100.

Target

Pathway Carbohydrate metabolism; galactose metabolism.
Involvement in disease Defects in GALT are the cause of galactosemia (GALCT) [MIM:230400]. Galactosemia is an inherited disorder of galactose metabolism that causes jaundice, cataracts, and mental retardation.
Sequence similarities Belongs to the galactose-1-phosphate uridylyltransferase type 1 family.

Images



All lanes : Anti-GALT antibody [EPR12555] (ab178406) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GALT knockout HeLa cell lysate
Lane 3 : HepG2 cell lysate
Lane 4 : A549 cell lysate

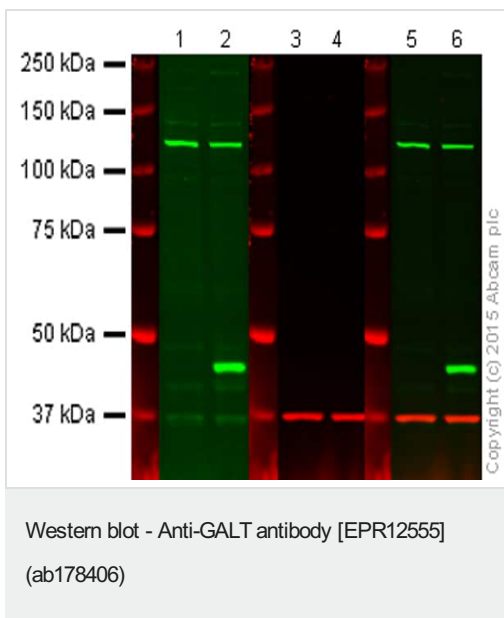
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 43 kDa

Lanes 1-4: Merged signal (red and green). Green - ab178406 observed at 43 kDa. Red - loading control **ab7291** observed at 50 kDa.

ab178406 Anti-GALT antibody [EPR12555] was shown to specifically react with Galactose-1-Phosphate Uridyltransferase in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265027](#) (knockout cell lysate [ab257958](#)) was used. Wild-type and Galactose-1-Phosphate Uridyltransferase knockout samples were subjected to SDS-PAGE. ab178406 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) 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.



Lanes 1-2 : Anti-GALT antibody [EPR12555] (ab178406) at 1/1000 dilution

Lanes 3-4 : Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) at 1/2000 dilution

Lanes 1 & 3 : GALT knockout HAP1 cell lysate

Lanes 2 & 4 : Wild-type HAP1 cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 43 kDa

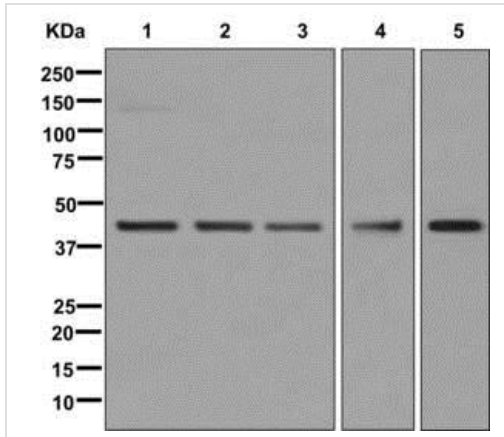
Lanes 1 and 2: Green signal from target – ab178406 observed at 43 kDa

Lanes 3 and 4: Red signal from loading control – [ab8245](#) observed at 37 kDa

Lanes 5 and 6: Merged (red and green) signal

ab178406 was shown to react with GALT when GALT knockout samples were used, along with additional cross-reactive bands. Wild-type and GALT knockout samples were subjected to SDS-PAGE. ab178406 and [ab8245](#) (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. 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

1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-GALT antibody [EPR12555]
(ab178406)

All lanes : Anti-GALT antibody [EPR12555] (ab178406) at 1/1000 dilution

Lane 1 : K562 cell lysate

Lane 2 : MDA-MB-435 cell lysate

Lane 3 : Human fetal brain lysate

Lane 4 : Human fetal liver lysate

Lane 5 : HepG2 cell lysate

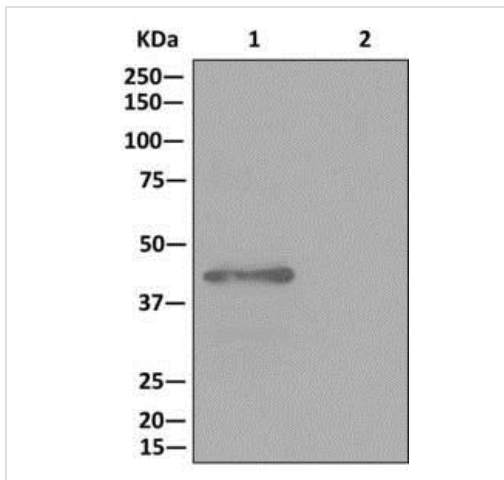
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 43 kDa



Immunoprecipitation - Anti-GALT antibody
[EPR12555] (ab178406)

Western blot analysis on Immunoprecipitation pellet from either 1) Human fetal liver lysate, or 2) 1xPBS (negative control); showing GALT, immunoprecipitated using ab178406 at 1/10 dilution with HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit 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-GALT antibody [EPR12555] (ab178406)

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

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