

Product datasheet

Anti-Galectin 3 antibody [EPR19244] ab209344

KO VALIDATED Recombinant RabMAB

★★★★★ [5 Abreviews](#) [5 References](#) [13 Images](#)

Overview

Product name	Anti-Galectin 3 antibody [EPR19244]
Description	Rabbit monoclonal [EPR19244] to Galectin 3
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IP, ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, SW480, MCF7, A431 and Wild-type A549 whole cell lysates; human heart, kidney and stomach lysates. IHC-P: Human liver, stomach, diffuse large B cell lymphoma and colon cancer tissues. ICC/IF: HeLa and A431 cells. Flow Cyt (intra): HeLa cells. IP: HeLa 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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19244

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab209344 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)		1/50.
IP		1/30.
ICC/IF	★★★★★ (3)	1/500.
IHC-P	★★★★★ (1)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 26 kDa (predicted molecular weight: 26 kDa).

Target

Function

Galactose-specific lectin which binds IgE. May mediate with the alpha-3, beta-1 integrin the stimulation by CSPG4 of endothelial cells migration. Together with DMBT1, required for terminal differentiation of columnar epithelial cells during early embryogenesis.

Tissue specificity

A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages.

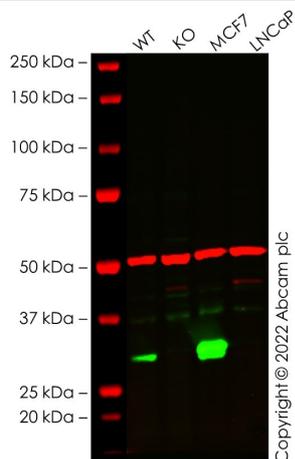
Sequence similarities

Contains 1 galectin domain.

Cellular localization

Nucleus. Cytoplasmic in adenomas and carcinomas. May be secreted by a non-classical secretory pathway and associate with the cell surface.

Images



Western blot - Anti-Galectin 3 antibody [EPR19244] (ab209344)

All lanes : Anti-Galectin 3 antibody [EPR19244] (ab209344) at 1/1000 dilution

Lane 1 : Wild-type A549 cell lysate

Lane 2 : LGALS3 knockout A549 cell lysate

Lane 3 : MCF7 cell lysate

Lane 4 : LNCaP cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

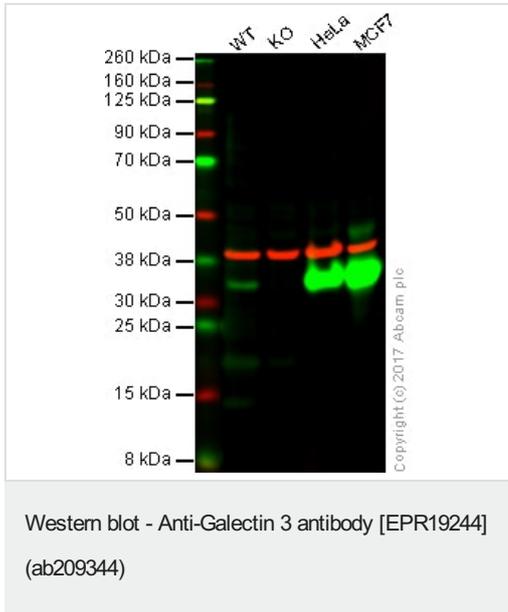
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 26 kDa

Observed band size: 30 kDa

False colour image of Western blot: Anti-Galectin 3 antibody [EPR19244] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab209344 was shown to bind specifically to Galectin 3. A band was observed at 30 kDa in wild-type A549 cell lysates with no signal observed at this size in LGALS3 knockout cell line. To generate this image, wild-type and LGALS3 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

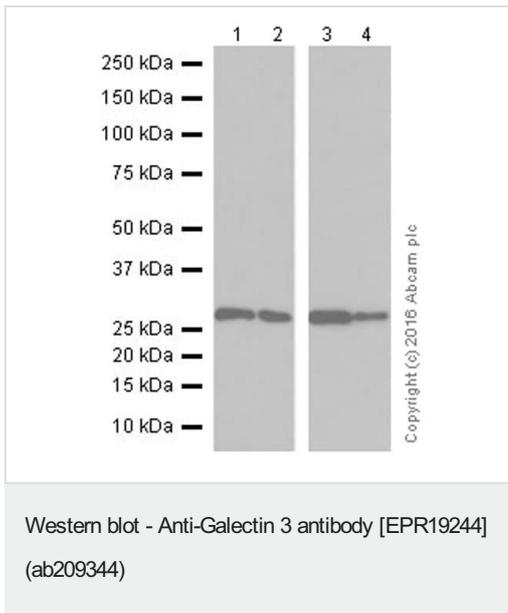
Lane 2: Galectin 3 (KO) knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: MCF7 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab209344 observed at 35 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab209344 was shown to specifically react with Galectin 3 (KO) in wild-type HAP1 cells. No band was observed when LGALS3 (KO) knockout samples were examined. Wild-type and Galectin 3 (KO) knockout samples were subjected to SDS-PAGE. Ab209344 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 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 1/20,000 dilution for 1 hour at room temperature before imaging.



Lanes 1-2 : Anti-Galectin 3 antibody [EPR19244] (ab209344) at 1/10000 dilution

Lanes 3-4 : Anti-Galectin 3 antibody [EPR19244] (ab209344) at 1/1000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 4 : A431 (Human epidermoid carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

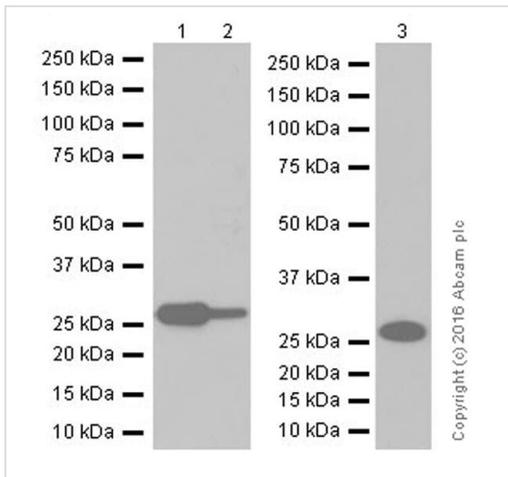
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 26 kDa

Observed band size: 26 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1/2: 30 seconds; Lane 3/4: 8 seconds



Western blot - Anti-Galectin 3 antibody [EPR19244] (ab209344)

All lanes : Anti-Galectin 3 antibody [EPR19244] (ab209344) at 1/1000 dilution

Lane 1 : Human heart tissue

Lane 2 : Human kidney tissue

Lane 3 : Human stomach tissue

Lysates/proteins at 10 µg per lane.

Secondary

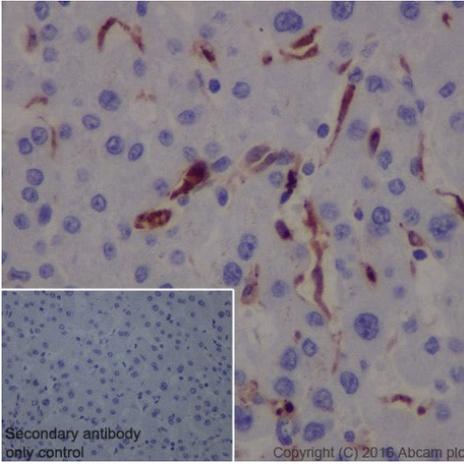
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 26 kDa

Observed band size: 26 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1/2: 15 seconds; Lane 3: 30 seconds

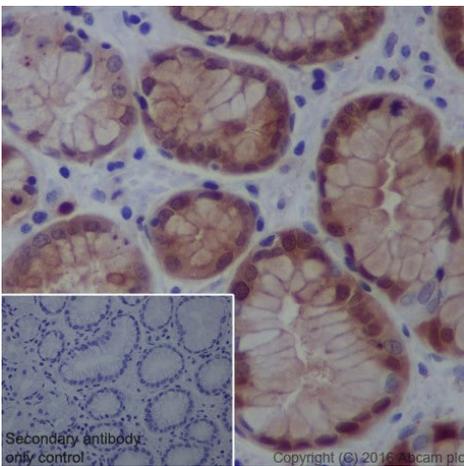


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Galectin 3 with ab209344 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Positive staining on Kupffer cells in the liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

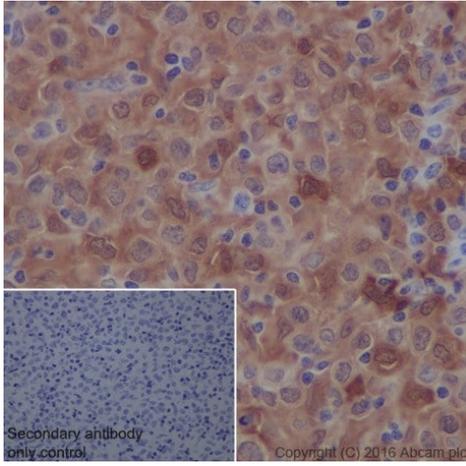


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling Galectin 3 with ab209344 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic and nuclear staining on human stomach is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

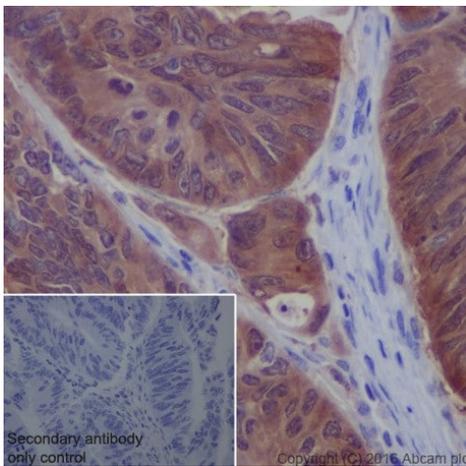


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Immunohistochemical analysis of paraffin-embedded human diffuse large B cell lymphoma tissue labeling Galectin 3 with ab209344 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic and weak nuclear staining on human diffuse large B cell lymphoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

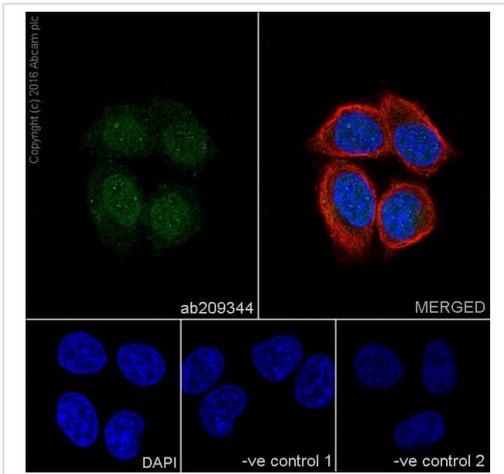


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling Galectin 3 with ab209344 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic and weak nuclear staining on human colon cancer is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Galectin 3 antibody [EPR19244] (ab209344)

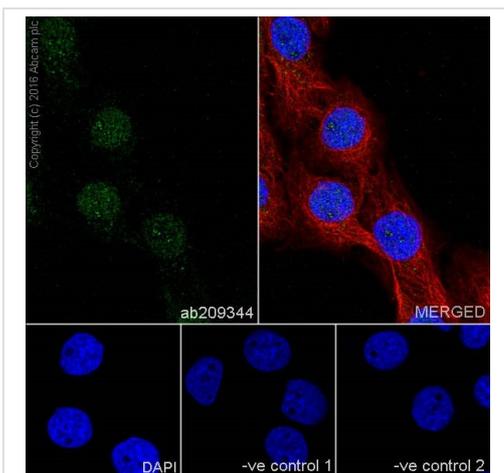
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Galectin 3 with ab209344 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weak cytoplasmic staining on HeLa cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab209344 at 1/500 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Galectin 3 antibody [EPR19244] (ab209344)

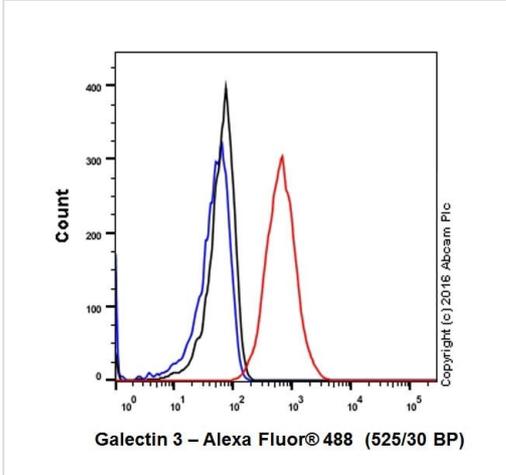
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A431 (Human epidermoid carcinoma cell line) cells labeling Galectin 3 with ab209344 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining on A431 cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

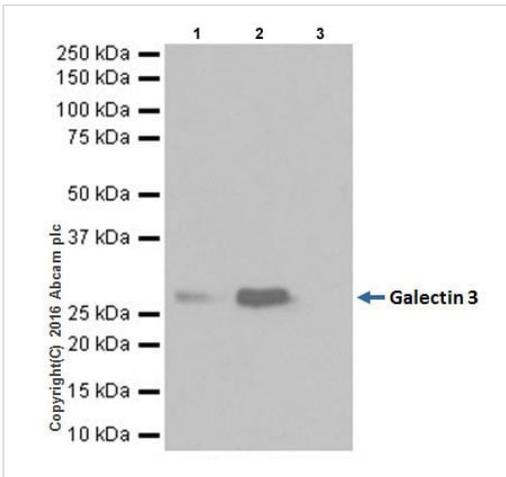
-ve control 1: ab209344 at 1/500 dilution followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Galectin 3 with ab209344 at 1/50 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Galectin 3 antibody [EPR19244] (ab209344)

Galectin 3 was immunoprecipitated from 0.35 mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab209344 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab209344 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate 10µg (Input).

Lane 2: ab209344 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab209344 in HeLa whole cell lysate.

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

Exposure time: 8 seconds.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Galectin 3 antibody [EPR19244] (ab209344)

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

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