

Product datasheet

Anti-Galectin 1 antibody [EPR3206(2)] ab138513

KO VALIDATED Recombinant RabMAB

[8 References](#) [7 Images](#)

Overview

Product name	Anti-Galectin 1 antibody [EPR3206(2)]
Description	Rabbit monoclonal [EPR3206(2)] to Galectin 1
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Galectin 1 aa 50-150. The exact sequence is proprietary.
Positive control	WB: K562 cell lysate, mouse heart and rat heart tissue lysate IHC: human kidney tissue ICC/IF: K-562 (Human chronic myelogenous leukemia lymphoblast)
General notes	<p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3206(2)
Isotype	IgG

Applications

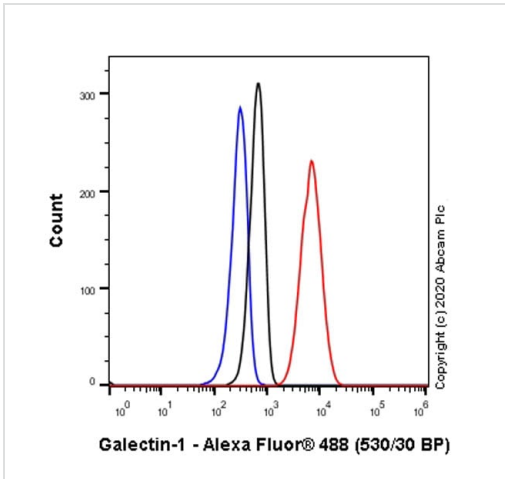
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab138513 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000. Detects a band of approximately 14 kDa (predicted molecular weight: 15 kDa).
IHC-P		1/16000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF		1/50.

Target

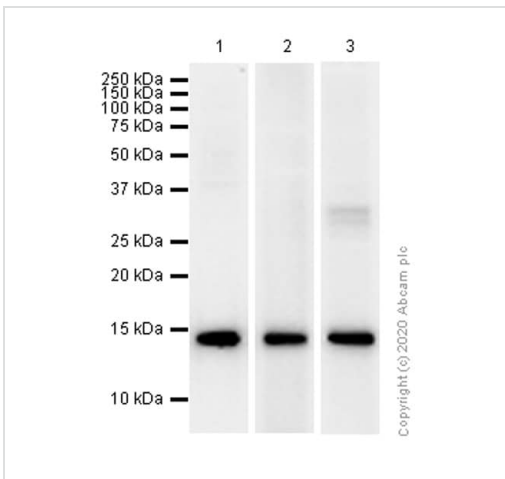
Function	May regulate apoptosis, cell proliferation and cell differentiation. Binds beta-galactoside and a wide array of complex carbohydrates. Inhibits CD45 protein phosphatase activity and therefore the dephosphorylation of Lyn kinase.
Tissue specificity	Expressed in placenta, maternal decidua and fetal membranes. Within placenta, expressed in trophoblasts, stromal cells, villous endothelium, syncytiotrophoblast apical membrane and villous stroma. Within fetal membranes, expressed in amnion, chorioamniotic mesenchyma and chorion (at protein level). Expressed in cardiac, smooth, and skeletal muscle, neurons, thymus, kidney and hematopoietic cells.
Sequence similarities	Contains 1 galectin domain.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



Flow Cytometry (Intracellular) - Anti-Galectin 1 antibody [EPR3206(2)] (ab138513)

Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labelling Galectin 1 with Purified ab138513 at 1:30 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor™ 488, **ab150077**) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-Galectin 1 antibody [EPR3206(2)] (ab138513)

All lanes : Anti-Galectin 1 antibody [EPR3206(2)] (ab138513) at 1/10000 dilution (Purified)

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

Lane 2 : Mouse heart lysate

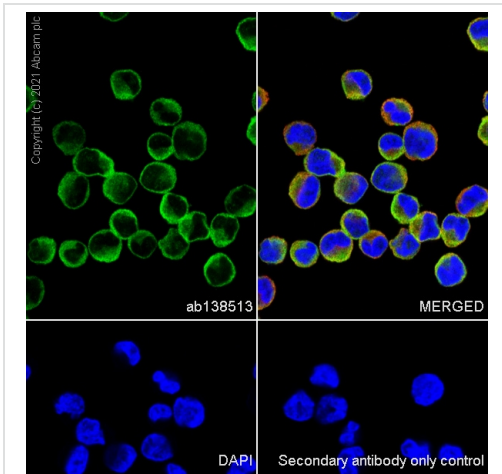
Lane 3 : Rat heart lysate

Secondary

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

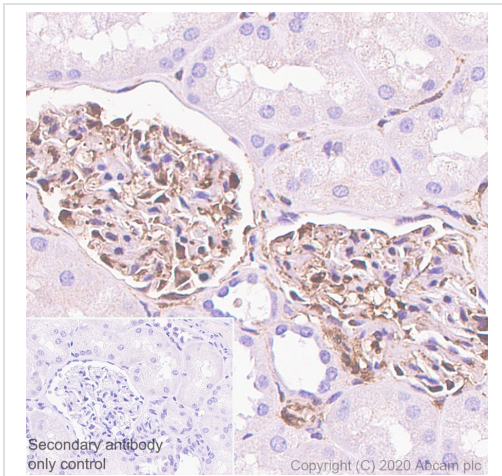
Predicted band size: 15 kDa

Observed band size: 14 kDa



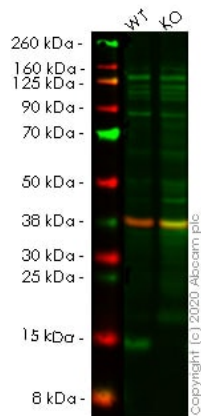
Immunocytochemistry/ Immunofluorescence - Anti-Galectin 1 antibody [EPR3206(2)] (ab138513)

Immunocytochemistry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling Galectin 1 with Purified ab138513 at 1/50 dilution (5.4 µg/mL). Cells were fixed in 100% Methanol and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Galectin 1 antibody [EPR3206(2)] (ab138513)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling Galectin 1 with Purified ab138513 at 1/16000 dilution (0.02 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control. M3



Western blot - Anti-Galectin 1 antibody
[EPR3206(2)] (ab138513)

All lanes : Anti-Galectin 1 antibody [EPR3206(2)] (ab138513) at 1/1000 dilution (Unpurified)

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

Lane 2 : LGALS1 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

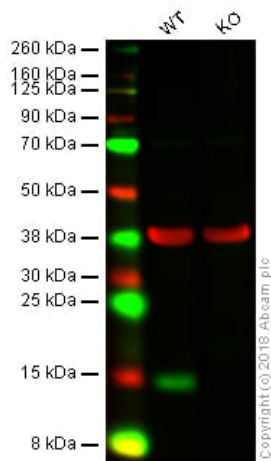
Performed under reducing conditions.

Predicted band size: 15 kDa

Observed band size: 15 kDa

Lanes 1-2: Merged signal (red and green). Green - ab138513 observed at 15 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab138513 was shown to react with Galectin 1 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line [ab266850](#) (knockout cell lysate [ab256974](#)) was used. Wild-type HEK-293T and LGALS1 knockout HEK-293T cell lysates were subjected to SDS-PAGE. ab138513 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 Dilution and a 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.



Western blot - Anti-Galectin 1 antibody [EPR3206(2)] (ab138513)

All lanes : Anti-Galectin 1 antibody [EPR3206(2)] (ab138513) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : LGALS1 (Galectin 1) knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 15 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab138513 observed at 15 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab138513 was shown to specifically react with Galectin 1 in wild-type HAP1 cells as signal was lost in LGALS1 (Galectin 1) knockout cells. Wild-type and LGALS1 (Galectin 1) knockout samples were subjected to SDS-PAGE. ab138513 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution 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.

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-Galectin 1 antibody [EPR3206(2)] (ab138513)

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