# abcam

# Product datasheet

# Anti-galectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free ab246797

יעלאעבע RabMAb

画像数7

## 製品の概要

製品名 Anti-galectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free

製品の詳細 Rabbit monoclonal [EPR22214] to galectin 9/Gal-9 - Low endotoxin, Azide free

由来種 Rabbit

特異性 This antibody is not recommended for mouse and rat in IHC.

アプリケーション 適用あり: IHC-P, WB, ICC/IF, Flow Cyt (Intra)

適用なし: №

種交差性 交差種: Human

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

ポジティブ・コントロール IHC-P: Human liver and colon tissue. ICC/IF: U937 cells. Flow Cyt (intra): U937 cells. WB: THP-1

whole cell lysates.

特記事項 ab246797 is the carrier-free version of ab227046.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

## 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

特記事項(精製) Endotoxin level is less than 1 EU/ml as determined by the TAL test

**ポリ/モノ** モノクローナル **ウローン名** EPR22214

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab246797の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.  This antibody is not recommended for human in IHC.
WB		Use at an assay dependent concentration. Predicted molecular weight: 40 kDa.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

追加情報 Is unsuitable for IP.

# ターゲット情報

#### 機能

Binds galactosides. Has high affinity for the Forssman pentasaccharide. May play a role in thymocyte-epithelial interactions relevant to the biology of the thymus. Inhibits cell proliferation. It is a ligand for HAVCR2/TIM3. Induces T-helper type 1 lymphocyte (Th1) death. Isoform Short acts as an eosinophil chemoattractant.

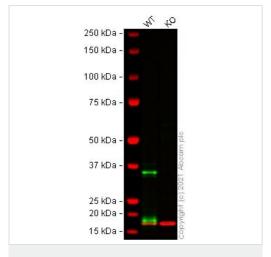
組織特異性 Peripheral blood leukocytes and lymphatic tissues. Overexpressed in Hodgkin disease tissue.

**配列類似性** Contains 2 galectin domains.

ドメイン Contains two homologous but distinct carbohydrate-binding domains.

細胞内局在 Cytoplasm. Secreted. May also be secreted by a non-classical secretory pathway.

#### 画像



Western blot - Anti-galectin 9/Gal-9 antibody
[EPR22214] - Low endotoxin, Azide free (ab246797)

**All lanes :** Anti-galectin 9/Gal-9 antibody [EPR22214] (**ab227046**) at 1/1000 dilution

Lane 1: Wild-type THP-1 cell lysate

Lane 2: LGALS9 knockout THP-1 cell lysate

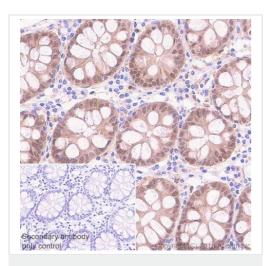
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 40 kDa Observed band size: 35 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - <u>ab227046</u> observed at 35 kDa. Red - loading control Mouse anti Histone H3 observed at 18 kDa.

ab227046 was shown to react with galectin 9/Gal-9 in wild-type THP-1 cells in Western blot with loss of signal observed in LGALS9 knockout cell line ab269505 (knockout cell lysate ab269667). Wild-type THP-1 and LGALS9 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab227046 and Mouse anti Histone H3 overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



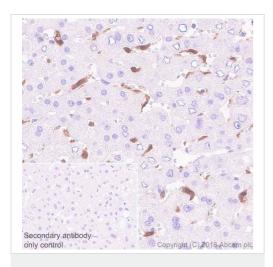
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-galectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free (ab246797)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling galectin 9/Gal-9 with <u>ab227046</u> at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit lgG H&L (HRP).

Nuclear and cytoplasmic staining on epithelial cells of human colon (PMID: 18202194) is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227046).



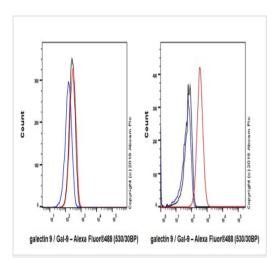
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-galectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free (ab246797)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling galectin 9/Gal-9 with <a href="mailto:ab227046">ab227046</a> at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear and cytoplasmic staining on Kupffer cells of human liver (PMID: 20209097, PMID: 18202194) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227046).

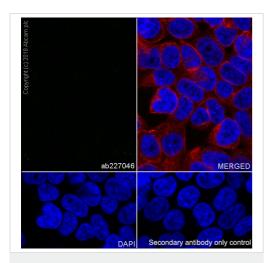


Flow Cytometry (Intracellular) - Anti-galectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free (ab246797)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized PANC-1 (human pancreatic epithelial cancinoma cell line) (Left) / U937 (human histiocytic lymphoma cell line) (Right) cell line labeling galectin 9/Gal-9 with <a href="mailto:ab227046">ab227046</a> at 1/500 (red) compared with a Rabbit monoclonal lgG (<a href="mailto:ab172730">ab172730</a>) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <a href="mailto:ab150077">ab150077</a>), at 1/2000 dilution was used as the secondary antibody.

## Negative Control - PANC-1 cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227046).



Immunocytochemistry/ Immunofluorescence - Antigalectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free (ab246797)

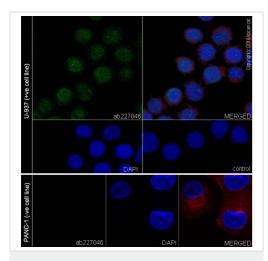
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (human epithelial cell line from embryonic kidney) cells labeling galectin 9/Gal-9 with <a href="mailto:ab227046">ab227046</a> at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/1000 dilution (green).

Confocal image showing no staining in HEK-293T cells

**Negative control**: HEK-293T (PMID: 11698107). The nuclear counterstain is DAPI (blue).

Counterstained with <u>ab195889</u> Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) at a 1/200 dilution (red). Secondary antibody only control: Used PBS instead of the primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab227046</u>).



Immunocytochemistry/ Immunofluorescence - Antigalectin 9/Gal-9 antibody [EPR22214] - Low endotoxin, Azide free (ab246797) Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U937 (human histiocytic lymphoma cell line) cells labeling galectin 9/Gal-9 with <a href="mailto:ab227046">ab227046</a> at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining in U-937 cells. The nuclear counterstain is DAPI (blue).

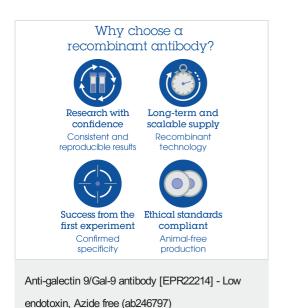
Counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A]

- Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

PANC-1 (human pancreatic epithelial cancinoma cell line) cells stained in the same manner serve as a negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227046).



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