Product datasheet

Anti-Galectin 1 antibody ab25138

4.5 stars 2 Abreviews 20 References 6 Images

Overview

Product name Anti-Galectin 1 antibody
Description Rabbit polyclonal to Galectin 1
Host species Rabbit
Tested applications Suitable for: IHC-P, ICC/IF, Flow Cyt, ELISA, WB
Species reactivity Reacts with: Human
Immunogen Recombinant full length protein (Human).

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer pH: 7.40
Constituent: 1.34% PBS
Purity Immunogen affinity purified
Clonality Polyclonal
Isotype IgG

Applications

Our Abpromise guarantee covers the use of ab25138 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
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<tr>
<td>ICC/IF</td>
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<td>Use a concentration of 1 µg/ml.</td>
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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.

Target

Flow Cyt

Use at an assay dependent concentration. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

ELISA

Use a concentration of 0.5 µg/ml. Using 100 µl/well of antibody solution, allows the detection of 0.2-0.4 ng/well of recombinant human Galectin 1.

WB

Use a concentration of 0.1 - 0.2 µg/ml. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa). The detection limit for recombinant human Galectin 1 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

Images

Anti-Galectin 1 antibody (ab25138) at 1 µg/ml + Human placenta tissue lysate - total protein (ab29745) at 10 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 14 kDa
Observed band size: 14 kDa
Additional bands at: 32 kDa, 45 kDa, 73 kDa. We are unsure as to the identity of these extra bands.
ICC/IF image of ab25138 stained Hek293 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab25138, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM.

IHC image of ab25138 staining in human normal kidney formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab25138, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

ab25138 staining Galectin 1 in Human umbilical cord blood mesenchymal stem cells by Flow Cytometry. Cells were fixed with formaldehyde. The sample was incubated with the primary antibody (1/100 in PBS + 1% BSA) for 30 minutes at 4°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/2000) was used as the secondary antibody.

Purple - isotype control, Green - Galectin 1.
ab25138 staining Galectin-1 in Human cervical cancer tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/1000 in 1% BSA in PBS) overnight at room temperature. An Alexa Fluor A647-conjugated Donkey anti-rabbit polyclonal (1/200) was used as the secondary antibody.

Representative images from double stainings of Galectin-1 and CD163. Arrows indicate examples of double positive cells.

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