

DESCRIPTION

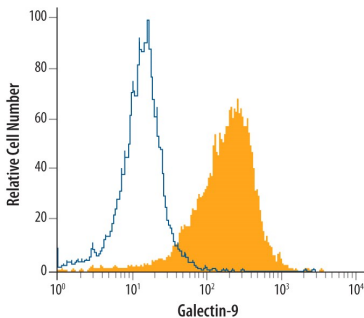
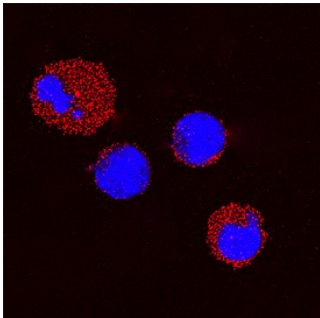
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| Species Reactivity | Mouse |
| Specificity | Detects mouse Galectin-9 in direct ELISAs and Western blots. In Western blots, approximately 30% cross-reactivity with recombinant human (rh) Galectin-9 is observed. In direct ELISAs and Western blots, less than 2% cross-reactivity with rhGalectin-1, rhGalectin-2, rhGalectin-3, rhGalectin-7, rhGalectin-8, recombinant mouse (rm) Galectin-1, rmGalectin-3, rmGalectin-4, and rmGalectin-7 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant mouse Galectin-9 Ala2-Thr353; aa 148-178 deletion Accession # O08573 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---|--|------------------------------|
| Western Blot | 0.1 µg/mL | Recombinant Mouse Galectin-9 |
| Immunocytochemistry | 5-15 µg/mL | See Below |
| Intracellular Staining by Flow Cytometry | 2.5 µg/10 ⁶ cells | See Below |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |

DATA

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| <p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of Galectin-9 in Mouse Thymocytes by Flow Cytometry. Mouse thymocytes were stained with Goat Anti-Mouse Galectin-9 Short Isoform Affinity-purified Polyclonal Antibody (Catalog # AF3535, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0108). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p> | <p>Immunocytochemistry</p>  <p>Galectin-9 in Mouse Splenocytes. Galectin-9 was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse Galectin-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3535) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p> |
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PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Galectin-9, also known as Ecalectin, belongs to the Galectin family (S-type lectins) of galactoside-binding proteins. It is a 36-39 kDa protein that lacks a secretion signal sequence, but can be secreted by a non-classical pathway. Galectin-9 is a tandem-repeat Galectin with two Galectin domains joined by a linker region. Two alternative spliced variants, a short and a long isoform, exist. Galectin-9 short isoform is expressed in a variety of tissues and cells, including fibroblasts, hepatocytes, endothelial cells and astrocytes. The long isoform, however, is expressed primarily in the intestine. Galectin-9 binds TIM-3 on Th1 cells, inducing apoptosis. Mouse Galectin-9 shares 69% and 85% amino acid sequence identity with human and rat Galectin-9, respectively.