Species Reactivity  
Mouse

Specificity  
Detects mouse Galectin-7 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse Galectin-1, -3, -4, recombinant human (rh) Galectin-2, -7, or -8 is observed. In Western blots, approximately 20% cross-reactivity with rhGalectin-3, approximately 10% cross-reactivity with rhGalectin-7, and no cross-reactivity with rhGalectin-1 is observed.

Source  
Monoclonal Rat IgG2A Clone # 212923

Purification  
Protein A or G purified from hybridoma culture supernatant

Immunogen  
E. coli-derived recombinant mouse Galectin-7  
Ser2-Phe136  
Accession # AAK29385

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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>Recombinant Mouse Galectin-7 (Catalog # 1304-GA)</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>See Below</td>
</tr>
<tr>
<td>Mouse Galectin-7 Sandwich Immunoassay</td>
<td>Reagent</td>
</tr>
<tr>
<td>ELISA Capture</td>
<td>Mouse Galectin-7 Antibody (Catalog # MAB1304)</td>
</tr>
<tr>
<td>ELISA Detection</td>
<td>Mouse Galectin-7 Biotinylated Antibody (Catalog # BAF1304)</td>
</tr>
<tr>
<td>Standard</td>
<td>Recombinant Mouse Galectin-7 (Catalog # 1304-GA)</td>
</tr>
</tbody>
</table>

DATA

**Immunohistochemistry**

Galectin-7 in Mouse Thymus.  
Galectin-7 was detected in perfusion fixed frozen sections of mouse thymus using Rat Anti-Mouse Galectin-7 Monoclonal Antibody (Catalog # MAB1304A) at 25 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of lymphocytes. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

PREPARATION AND STORAGE

<table>
<thead>
<tr>
<th>Reconstitution</th>
<th>Reconstitute at 0.5 mg/mL in sterile PBS.</th>
</tr>
</thead>
</table>
| 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.  
- 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. |
The galectins constitute a large family of carbohydrate-binding proteins with specificity for N-acetyl-lactosamine-containing glycoproteins. At least 14 mammalian galectins, which share structural similarities in their carbohydrate recognition domains (CRD), have been identified. The galectins have been classified into the prototype galectins (-1, -2, -5, -7, -10, -11, -13, -14), which contain one CRD and exist either as a monomer or a noncovalent homodimer; the chimera galectins (Galectin-3) containing one CRD linked to a nonlectin domain; and the tandem-repeat galectins (-4, -6, -8, -9, -12) consisting of two CRDs joined by a linker peptide. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments where they have intracellular functions. However, via one or more as yet unidentified non-classical secretory pathways, galectins can also be secreted to function extracellularly. Individual members of the galectin family have different tissue distribution profiles and exhibit subtle differences in their carbohydrate-binding specificities. Each family member may preferentially bind to a unique subset of cell-surface glycoproteins (1-4).

Mouse Galectin-7 is a prototype monomeric galectin. It is expressed in stratified epithelia and is significantly down-regulated in squamous cell carcinomas. Galectin-7 is a pro-apoptotic protein that is highly induced by the tumor suppressor protein p53. It functions intracellularly upstream of JNK activation to enhance cytochrome c release during apoptosis (5). Galectin-7 may also be involved in cell-cell and cell-matrix interactions and exogenous galectin has been found to accelerate the re-epithelialization of wounds (6).

References: