

Datasheet

Anti-Galectin-8 Antibody, Mouse Monoclonal

Clone VA-11.25, purified from hybridoma cell culture

G5671

Product Description

Monoclonal Anti-Galectin 8 (mouse IgM isotype) is derived from the hybridoma VA-11.25 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant rat galectin 8 (GeneID 116641). The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Cat. No. ISO2.

Monoclonal Anti-Galectin 8 recognizes rat, mouse, and human galectin 8. It has low cross reactivity with galectin 3 and galectin 9. The antibody may be used in various immunochemical techniques including ELISA, immunoblotting (~ 34 kDa), and immunocytochemistry.

Galectins are an evolutionarily conserved family of carbohydrate-binding proteins that share sequence similarities in the carbohydrate recognition domain (CRD), in addition to specificity for N-Acetyllactosamine-enriched glycoconjugates.¹ Fifteen mammalian galectins have been identified to date, some contain one CRD and are biologically active as monomers (galectins 5, 7, 10), as homodimers (galectins 1, 2, 11, 13, 14, 15) or as oligomers that aggregate through their non-lectin domain (galectin 3); others contain two CRDs connected by a short linker peptide (galectins 4, 6, 8, 9, 12).² Within this family of proteins, galectin 8 is unique in that it exists in many forms encoded by the same gene.³ Like other galectins, it is a secreted protein. Galectin 8 is a modulator of cell adhesion and it needs both CRDs to be active.⁶ Complex formation between galectin 8 and integrins triggers integrin-mediated signaling cascades. In contrast, when present in excess its interaction with integrins negatively regulates cell adhesion. Such mechanism allows local signals emitted by secreted galectin 8 to specify territories available for cell adhesion and migration. In addition to its dual effect on adhesive properties of cells, galectin 8 expression levels positively correlate with certain human neoplasms, including prostate and breast cancer, suggesting its role in neoplastic transformation.^{4, 5}

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~ 1.0 mg/mL.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 µg/mL is recommended using recombinant rat galectin 8 protein (Cat. No. G3670).

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Rabinovich, G.A., Cell Death Diff., 6, 711-721 (1999).
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3. Bidon-Wagner, N., and Le Pennec, J.P., Glycoconjugate J., 19, 557-563 (2004).
4. Levi, Y., et al., J. Biol. Chem., 276, 31285-31295 (2001).
5. Zick, Y., et al., Glycoconjugate J., 19, 517-526 (2004).
6. Yamamoto, H., et al., J. Biochem., 143, 311-324 (2008).

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