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Product Information

Monoclonal Anti-Digoxin, Clone DI-22
produced in mouse, ascites fluid

Catalog Number **D8156**

Product Description

Monoclonal Anti-Digoxin (mouse IgG1 isotype) is derived from the hybridoma DI-22 produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with Digoxin-KLH. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2.

Monoclonal Anti-Digoxin is specific for digoxin and digoxin-labeled compounds, and shows strong cross-reactivity with digoxigenin. The antibody may be used in various immunochemical techniques including ELISA, dot blot, flow cytometry,[1] DNA hybridization[2] and *in-situ* hybridization (ISH).[3,4]

This antibody may be used to detect digoxin-labeled compounds such as oligonucleotides, antibodies, or peptides. Labeled compounds and corresponding conjugated antibodies can be used for the detection of viruses and bacterial infections in human diagnostics, oncogenes as tumor markers, histocompatibility antigens in transplantation analytics causative research (e.g., in autoimmune diseases), characterization of lymphoid cell subpopulations (e.g., during treatment of lymphomas), determination of genetic defects or genetic defect predispositions (e.g., Alzheimer's disease), and nucleic acid diagnostics.

Reagent

Supplied as ascites fluid containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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

ELISA (indirect): Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 405 nm after 30 minutes of substrate conversion at 25 °C.

a. A minimum working dilution of 1:10,000 is determined using microtiter plates coated with purified digoxin-BSA at a concentration of 10 µg/mL in 0.05 M carbonate/bicarbonate buffer, pH 9.6.
b. A minimum working dilution of 1:2,500 is determined using microtiter plates coated with purified digoxigenin-transferrin at a concentration of 10 µg/mL in 0.05 M carbonate/bicarbonate buffer, pH 9.6.

Substrate: *p*-Nitrophenyl phosphate (pNPP), Catalog Number N2765, at 1.0 mg/mL in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM $MgCl_2$.
Carbonate/Bicarbonate Buffer capsules are available as Catalog Number C3041.

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

References

1. Taekema-Roelvink, M.E.J., et al., *J. Am. Soc. Nephrol.,* **11**, 640-648 (2000).
2. Kauppinen, J., et al., *J. Clin. Microbiol.*, **37**, 1454-1458 (1999).
3. Janmaat, M. L., et al., *J. Clin. Oncol.*, **24**, 1612-1619 (2006).
4. Moon, I.I.S., et al., *Mol. Cells*, **24**, 76-82 (2007).

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