

## Product Information

### ANTI-MOUSE IgM ( $\mu$ -CHAIN SPECIFIC) PEROXIDASE CONJUGATE

Antibody developed in Goat  
Affinity Isolated Antigen Specific Antiserum

Product Number **A 8786**

#### Product Description

Anti-Mouse IgM ( $\mu$ -Chain Specific) is developed in goat using purified mouse IgM as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-mouse IgM antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the  $\mu$ -chain of mouse IgM. Goat anti-mouse IgM is conjugated to Sigma Horseradish Peroxidase, Type VI (Product No. P 8375) by a modification of the periodate method of Wilson and Nakane.<sup>1</sup>

Specificity of the Peroxidase Conjugated Anti-Mouse IgM is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgM when tested against purified mouse IgA, IgM, and IgG.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion against anti-goat IgG and anti-goat whole serum results in single arcs of precipitation.

#### Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with preservative.

#### Precautions and Disclaimer

Consult the MSDS for information regarding hazards and handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for a maximum of one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and

thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

#### Product Profile

We are now reporting lot specific information as a titer by direct ELISA (1:10,000 – 1:30,000) rather than as a working dilution. Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C.<sup>2</sup> Microtiter plates are coated with purified mouse IgM at a concentration of 5  $\mu$ g/mL in 0.05 M carbonate-bicarbonate buffer, pH 9.6 (Carbonate/Bicarbonate Buffer Capsules are available as Product No. C 3041).

Substrate: o-Phenylenediamine dihydrochloride (OPD, Product No. P 8287), 0.4 mg/mL in 0.05 M phosphate-citrate buffer, pH 5.0, containing 0.03% sodium perborate (Phosphate-Citrate Buffer Capsules with Sodium Perborate are available as Product No. P 4922).

Working dilution should be determined by titration assay. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

#### References

1. Wilson, M., and Nakane, P., *Immunofluorescence and Related Staining Techniques*, p. 215 (Elsevier/North Holland Biomedical Press, Amsterdam 1978).
2. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

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