



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

ANTI-HUMAN IgM (μ -CHAIN SPECIFIC)

Developed in goat

Affinity Isolated Antigen Specific Antibody

Product No. I 2386

Product Description

Anti-Human IgM antiserum is developed in goat using IgM purified from human serum as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-human IgM antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the μ -chain of human IgM.

Specificity for the μ -chain of human IgM is determined ELISA (Enzyme Linked Immunosorbent Assay) and immunoelectrophoresis (IEP). The antibody preparation is specific for human IgM μ -chain when tested against purified human IgA, IgG IgM, Bence Jones kappa and Bence Jones lambda myeloma proteins. When tested by Ouchterlony double diffusion (ODD) the product shows no interspecies cross reaction with mouse or rat serum proteins.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP). Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and anti-goat whole serum results in a single arc of precipitation.

Affinity purified anti-human IgM reagent offers the advantage of increased sensitivity for human IgM without cross reactivity with other substances present on membrane or cell surface. The lack of interspecies cross reactivity with mouse or rat serum proteins makes this product excellent for the screening of human monoclonal antibodies produced by hybridoma cells grown *in vivo* in mouse or rat ascites fluids. This product has the ability to detect human IgM in human biological fluids or tissues of normal or pathological situations such as cancer or autoimmune diseases.

It is effective as a second antibody reagent in immunoassay procedures and can be used as starting material for conjugates using enzymes or fluorescent dyes.

Reagents

The purified antibody is supplied as a liquid in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Product Profile

Quantitative Precipitin Analysis

Each milliliter of antiserum contains 1.6 to 2.4 mg of specific antibody. Human serum proteins are used to determine the antibody concentration by a quantitative precipitation assay.

Protein Concentration: 2.0 to 2.5 mg/ml by $E_{280}^{1\%} = 14.0$.

Storage

For continuous use, store at 2-8 °C for up to 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.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet U.S.D.A. requirements.

PCS 7/00

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