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Product Information

Monoclonal Anti-FITC-Alkaline Phosphatase, clone FL-D6
produced in mouse, purified Immunoglobulin

Catalog Number **A1812**

Product Description

Monoclonal Anti-FITC (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. A FITC-BSA conjugate was used as the immunogen. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The immunoglobulin fraction of Monoclonal Anti-FITC is conjugated to alkaline phosphatase by protein cross-linking with 0.2% glutaraldehyde.[1]

In an ELISA, Monoclonal Anti-FITC-Alkaline Phosphatase will react with either free or conjugated FITC. The antibody does not react with bound or free TRITC (tetramethylrhodamine isothiocyanate). Monoclonal Anti-FITC recognizes the free FITC molecule and FITC conjugated to various biomolecules such as proteins (immunoglobulins, enzymes), oligonucleotides, nucleic acids and other ligands.

FITC (fluorescein isothiocyanate) is a fluorochrome dye that absorbs ultraviolet or blue light causing molecules to become excited and emit a visible yellow-green light. This emission ceases upon removal of the light causing the excitation. Fluorochrome labeling provides rapid, accurate localization of antigen-antibody interaction when one of the reactants is part of a cell, tissue or other biological structure. FITC is a commonly used marker for antibodies in immunofluorescent techniques since the conjugation of FITC to proteins is relatively easy and does not, in general, destroy the biological activity of the labeled protein. FITC is widely used as a hapten to label different proteins. Antibodies to FITC are used to identify FITC labeled proteins and as models to study the mechanism of antibody response to a well defined hapten.

Antibodies to FITC serve as universal indicator reagents by bridging FITC with another immunohistochemical reagent such as alkaline phosphatase or peroxidase.
Monoclonal Anti-FITC may be used for the detection of FITC and as a universal indicator reagent for bridging FITC with other immunochemical reagents. It can be used in ELISA and immunofluorescent techniques.

A FITC Anti-FITC system has been used in the amplification of signal in immunofluorescent detection and as a means of separating bound from free tracer by affinity chromatography. The antibody can also be used to isolate cells that have an FITC labeled ligand on their surface.

Reagent

Supplied as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1.0 mM $MgCl_2$, 50% glycerol and 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

Store at 2-8 °C. Do Not Freeze.

Product Profile

Indirect ELISA: a minimum dilution of 1:30,000 is determined using microtiter plates coated with human IgG (5 µg/ml) and Monoclonal Anti-Human IgG (Fc specific)-FITC, Catalog No. F5016, as the primary antibody.

Dot Blot (chemiluminescence): a minimum dilution of 1:80,000 is determined using 5 ng human IgG/dot and Monoclonal Anti-Human IgG (Fc specific)-FITC as the primary antibody .1,2-Dioxetane and an enhancer was used as substrate.

Indirect Immunohistology: a minimum dilution of 1:20 is determined using formalin-fixed, paraffin-embedded sections of human tonsil and Monoclonal Anti-Human IgG (Fc specific)-FITC as the primary antibody.

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