

sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-FITC antibody, Mouse monoclonal

clone FL-D6, purified from hybridoma cell culture

Product Number SAB4200738

Product Description

Anti-FITC antibody, Mouse monoclonal, (mouse IgG1 isotype) is derived from the FL-D6 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with FITC-BSA conjugate. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-FITC antibody specifically recognizes both free and conjugated FITC. The antibody does not react with bound or free TRITC (tetramethylrhodamine isothiocyanate). The antibody may be used in various immunochemical assays, including Immunoblot¹ (conjugated FITC), ELISA² and Immunohistochemistry³

FITC (fluorescein isothiocyanate) is a fluorochrome dye that absorbs ultraviolet or blue light (with peak wavelength of approximately 495 nm) causing molecules to become excited and emit a visible vellowgreen light (with peak wavelength of approximately 519 nm). This emission ceases upon removal of the light source causing the excitation. Fluorochrome labeling provides rapid and accurate localization of antigen-antibody interaction when one of the reactants is part of a cell, tissue or other biological structure⁵. FITC is a commonly used protein marker including antibodies in immunofluorescent techniques since the conjugation of FITC to proteins is relatively easy and generally does not destroy the biological activity of the labeled protein. Antibodies to FITC are used to identify FITC labeled proteins and as models to study the mechanism of antibody response to a well-defined hapten⁶⁻⁷.

Reagent

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

Antibody Concentration: ~ 1.0 mg/mL

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 -20° C. For continuous use, store at $2-8^{\circ}$ C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation. Discard working dilution samples if not used within 12 hours.

Product Profile

<u>Immunoblotting:</u> a working concentration of 1.25–2.5 µg/ml is recommended using ExtrAvidin®-FITC.

<u>Indirect ELISA:</u> a working concentration of 0.15–0.3 µg/ml is recommended using 5 µg/ml ExtrAvidin-FITC.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

- 1. Martín C., et al., *Dev Biol.*, **297**, 402-16 (2006).
- 2. Xiang D., et al., *Theranostics*, **5**, 1083-97 (2015).
- 3. Parvas M., et al., Dev Biol., 321, 51-63 (2008).
- 4. Metallo SJ., et al., *J Am Chem Soc.*, **125**, 4534-40 (2003).
- 5. Samuel D., et al., *J Immunol Methods*, **107**, 217-24 (1988).
- Rattle SJ., et al., *Clin Chem.*, **30**, 1457-61 (1984).
- 7. Haaijman JJ., et al., *Histochemistry*, **84**, 363-70 (1986).

ExtrAvidin is a registered trademark of Sigma-Aldrich Co. LLC

SG,DR_OKF/LV,PHC 12/16-1

©2016 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.