

## Technical Data Sheet

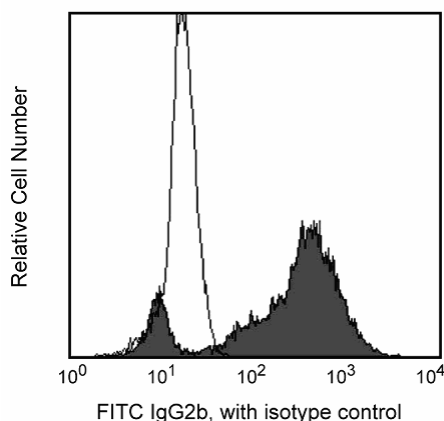
## FITC Mouse Anti-Rat IgG2b

## Product Information

Material Number:	553884
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	G15-337
Immunogen:	Pooled rat Ig
Isotype:	Mouse IgG2b, $\kappa$
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The G15-337 antibody reacts specifically with rat IgG2b. It does not react with other Ig isotypes. A suspension of pooled rat Ig was used as the source of immunogen.



**Detection of intracellular rat IgG2b in an antibody-secreting hybridoma cell line.** Cells were fixed, permeabilized, and stained according to the method described below using FITC-conjugated G15-337 mAb (shaded histogram) or the matched isotype control, FITC-conjugated 27-35 mAb (empty histogram, Cat. No. 555057). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

Flow cytometry	Routinely Tested
Intracellular staining (flow cytometry)	Routinely Tested

## Recommended Assay Procedure:

G15-337 antibody is effective for detection of cell-surface or intracellular Ig by immunofluorescent staining with flow cytometric analysis.

FITC-conjugated G15-337 mAb may be used as a primary or secondary reagent in immunofluorescent staining.

## IMMUNOFLUORESCENT STAINING OF INTRACELLULAR IMMUNOGLOBULIN (Ig) PROTOCOL

1. Prepare a single-cell suspension and determine cell number.
2. Suspend cells in staining buffer (PBS + 2% FBS + 0.1% Sodium Azide) at  $2 \times 10^7$  cells/ml and transfer to U-bottom microwell plates in 50  $\mu$ l/well for immunofluorescent staining.

**Note:** The BD Pharmingen™ Stain Buffer with FBS (Cat. No. 554656) is effective for use as a staining buffer in this protocol.

## BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



3. Block Fcγ receptors by adding 0.2 μg of purified 2.4G2 antibody (Mouse BD Fc Block™ purified anti-mouse CD16/CD32 mAb 2.4G2, Cat. No. 553141/553142), in 50 μl of staining buffer to each well.
  4. Incubate 5 minutes on ice.
  5. Add 200 μl of staining buffer/well and resuspend cells. Centrifuge at 250 x g for 5 minutes and aspirate supernatant.
  6. Block surface Ig with purified G15-337 mAb (Cat. No. 553882) by adding 1.0 μg per sample in 50 μl of staining buffer/well.
- Note:** Surface markers may be stained during this step as described in the "Immunofluorescent Staining of Mouse and Rat Leukocytes for Flow Cytometry" in the Technical Protocols section of our website at [http://wwwbdbiosciences.com/pharmingen/protocols/Mouse\\_and\\_Rat\\_Leukocytes.shtml](http://wwwbdbiosciences.com/pharmingen/protocols/Mouse_and_Rat_Leukocytes.shtml)
7. Incubate 15 minutes on ice.
  8. Wash 2x as described in Step 5.
  9. Resuspend cells in 100 μl of BD Cytotfix/Cytoperm™ intracellular staining buffer (see BD Cytotfix/Cytoperm™ Kit, Cat. No. 554714) per well.
  10. Incubate 30 minutes at room temperature.
  11. Wash 2x with 200 μl of 1x Perm/Wash buffer (provided in the BD Cytotfix/Cytoperm Kit) per well. Centrifuge at 250 x g for 5 minutes and aspirate supernatant between washes.
  12. Stain intracellular Ig by adding ≤ 1 μg of FITC-conjugated G15-337 mAb in 50 μl of 1 x Perm/Wash buffer/well.
- Note:** Other antibodies recommended for staining of intracellular markers may be added during this step as described in Step 12.
13. Incubate for 30 minutes at room temperature.
  14. Wash 2x as described in Step 11.
  15. Resuspend and transfer samples in 100 μl of staining buffer to tubes appropriate for analysis with a flow cytometer. Bring volume in each tube to 400 μl with staining buffer.
  16. Analyze samples on a flow cytometer.

### Suggested Companion Products

Catalog Number	Name	Size	Clone
555057	FITC Mouse IgG2b, κ Isotype Control	0.1 mg	27-35
554656	Stain Buffer (FBS)	500 ml	(none)
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553882	Purified Mouse Anti-Rat IgG2b	0.5 mg	G15-337
554714	BD Cytotfix/Cytoperm™ Fixation/Permeabilization Kit	250 tests	(none)

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [wwwbdbiosciences.com/pharmingen/protocols](http://wwwbdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.