# Technical Data Sheet Alexa Fluor® 700 Rat Anti-Mouse Ly-6C

#### **Product Information**

Material Number:
Alternate Name:
Size:
Concentration:
Clone:
Immunogen:
Isotype:
Reactivity:
Storage Buffer:

**561237** Ly6c; Lymphocyte antigen 6 complex, locus C; Lymphocyte antigen Ly-6C 50  $\mu$ g 0.2 mg/ml AL-21 Not reported Rat IgM,  $\kappa$ QC Testing: Mouse Aqueous buffered solution containing protein stabilizer and  $\leq 0.09\%$  sodium azide.

## Description

The AL-21 monoclonal antibody specifically binds to a non-polymorphic determinant of Ly-6C, a 14-17 kDa GPI-linked cell-surface antigen found on some monocyte/macrophage populations, granulocytes, endothelial cells, plasma cells, and thymocyte, NK-cell, and T-subsets. Mice with the Ly-6.2 alloantigen (eg, AKR, C57BL, C57BR, C57L, C58, DBA/2, PL, SJL, SWR, 129) have subsets of CD8+ and CD4+ Ly-6C+ T cells, while Ly-6.1 strains (eg, A, BALB/c, CBA, C3H/He, DBA/1, NZB) have only CD8+ Ly-6C+ T cells. Upregulation of Ly-6C expression on CD8+ T cells by interferons  $\alpha$  and  $\beta$  and poly (I:C) has been described, and Ly-6C is a memory marker on CD8+ T cells.



Flow cytometric analysis of Ly-6C expression on mouse splenocytes. Splenocytes from BALB/c mice were stained with PE Rat Anti-Mouse CD8a antibody (Cat. No. 553033/553032/561095) and with either Alexa Fluor® 700 Rat IgM,  $\kappa$  Isotype Control (Cat. No. 561207, Left Panel) or with Alexa Fluor® 700 Rat Anti-Mouse Ly-6C antibody (Cat. No. 561237, Right Panel). Two-color flow cytometric dot plots showing the correlated expression of Ly-6C (or Ig isotype control staining) versus CD8a were derived from gated events with the forward and side light-scattering characteristics of viable splenocytes. Flow cytometry was performed with a BD<sup>TM</sup> LSR II Flow Cytometry System.

## **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## **BD Biosciences**

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#### **Application Notes**

Application	
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Flow cytometry Routinely Tested

### Suggested Companion Products

Catalog Number	Name	Size	Clone	
561207	Alexa Fluor® 700 Rat IgM, κ Isotype Control	0.1 mg	R4-22	
554656	Stain Buffer (FBS)	500 ml	(none)	
553033	PE Rat Anti-Mouse CD8a	0.2 mg	53-6.7	
553032	PE Rat Anti-Mouse CD8a	0.1 mg	53-6.7	
561095	PE Rat Anti-Mouse CD8a	25 μg	53-6.7	

#### **Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
- 5. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.

6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.

7. 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.

8. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

#### References

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