

# GL7 Monoclonal Antibody (GL-7 (GL7)), eFluor™ 660, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgM
Recommended Isotype Control	Rat IgM Isotype Control (eBRM), eFluor™ 660, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GL-7 (GL7)
Conjugate	eFluor™ 660
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574252

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	0.25 µg/test	20 Publications
Functional Assay (FN)	-	1 Publication

## Product Specific Information

Description: This GL7 monoclonal antibody reacts with a cell-surface protein found on T and B lymphocytes activated in vitro, on bone marrow pre-B-II cells, germinal center B cells, and also human B cell lines Ramos and Daudi. There is strain variability with respect to antigen distribution on thymocytes and Con A-activated spleen cells, with expression in BALB/c greater than that in C57BL/6. GL7 is commonly used as a marker for mouse germinal center B cells. The epitope of GL7 has been identified as a sialic acid glycan moiety called Neu5Ac. This moiety is recognized by CD22.

Applications Reported: This GL-7 (GL7) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This GL-7 (GL7) antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is

recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

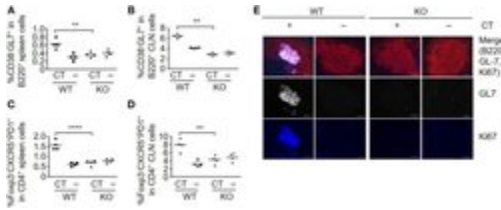
Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

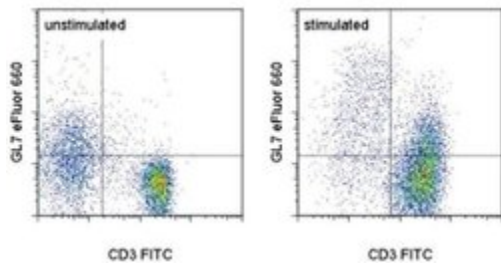
## Advanced Verification Data

### GL7 Antibody (50-5902-82)

Figure 2 Loss of S100A4 abrogates germinal center responses. S100A4 +/+ [wild-type (WT)] or S100A4 -/- [knockout (KO)] mice were sublingually (s.l.) treated with 200 µg ovalbumin mixed with or without 5 µg cholera toxin (CT) twice at an interval of 10 days. (A-D) Splens (A,C) and cervical lymph nodes (CLN) (B,D) were collected 3 days after the last s.l. treatment. Frequencies of spleen cell compartments that characterize germinal center formation including GL7 + B cells (A,B) and T follicular helper cells (C,D) were analyzed by flow cytometry. (E) Spleen sections were analyzed by immunohistochemistry to visualize germinal center B cells. Red, B220; white, GL7; blue, Ki67. Upper panels, merged images. Scale bar, 50 µm. Each symbol represents data from one individual mouse (A-D). Representative data were obtained from two similar experiments (E). P-values are derived from two-way ANOVA with Bonferroni's multiple comparisons test (Prism software 7) comparing the WT and KO mice. \*\* P < 0.01; \*\*\*\* P < 0.0001. Cell treatment validation info.



## Product Images For GL7 Monoclonal Antibody (GL-7 (GL7)), eFluor™ 660, eBioscience™



### GL7 Antibody (50-5902-82) in Flow

Staining of unstimulated (left) or 3-day Con A-stimulated (right) C57Bl/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.125 µg of Anti-Human /Mouse GL7 (T and B Cell Activation Marker) eFluor® 660. Total viable cells were used for analysis.

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## Immunohistochemistry (6)

### Cell metabolism

#### Microbiota-Derived Metabolites Suppress Arthritis by Amplifying Aryl-Hydrocarbon Receptor Activation in Regulatory B Cells.

"Published figure using GL7 monoclonal antibody (Product # 50-5902-82) in Immunohistochemistry"

Authors: Rosser EC, Piper CJM, Matei DE, Blair PA, Rendeiro AF, Orford M, Alber DG, Krausgruber T, Catalan D, Klein N, Manson JJ, Drozdov I, Bock C, Wedderburn LR, Eaton S, Mauri C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2020

### Frontiers in immunology

#### Deficiency in Calcium-Binding Protein S100A4 Impairs the Adjuvant Action of Cholera Toxin.

Authors: Sun JB, Holmgren J, Larena M, Terrinoni M, Fang Y, Bresnick AR, Xiang Z

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2019

[View more IHC references on thermofisher.com](#)

## Immunohistochemistry (Frozen) (1)

### PLoS pathogens

#### Gammaherpesvirus Co-infection with Malaria Suppresses Anti-parasitic Humoral Immunity.

"50-5902 was used in Immunofluorescence to demonstrate that an acute gammaherpesvirus infection can negatively impact the development of an anti-malarial immune response."

Authors: Matar CG, Anthony NR, O'Flaherty BM, Jacobs NT, Priyamvada L, Engwerda CR, Speck SH, Lamb TJ

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2015

## Immunocytochemistry (3)

### Frontiers in immunology

#### Deficiency in Calcium-Binding Protein S100A4 Impairs the Adjuvant Action of Cholera Toxin.

Authors: Sun JB, Holmgren J, Larena M, Terrinoni M, Fang Y, Bresnick AR, Xiang Z

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2019

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## More applications with references on thermofisher.com

**Flow (20)** **FN (1)**

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