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 10^5 to 10^8 cells/test. It is

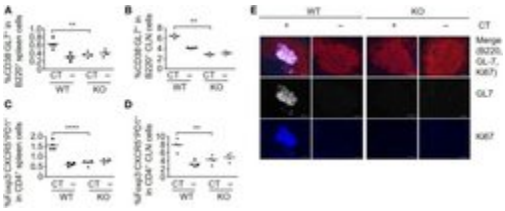
recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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 fluorochome.

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

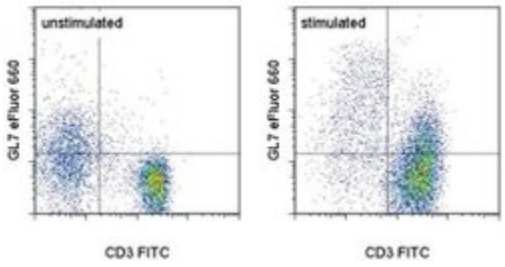
Filtration: 0.2 µm post-manufacturing filtered.

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 ug ovalbumin mixed with or without 5 ug cholera toxin (CT) twice at an interval of 10 days. (A-D) Spleens (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 um. 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.

View more figures on thermofisher.com

31 References

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

View more ICC/IF references on thermofisher.com

More applications with references on thermofisher.com

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