

Anti-Mouse TCR Gamma/Delta Antibody, Clone GL3, FITC



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Antibodies

Hamster (Armenian) monoclonal IgG2 antibody against mouse T cell receptor gamma/delta, FITC-conjugated

Catalog #60104FI
#60104FI.1

200 µg 0.5 mg/mL
50 µg 0.5 mg/mL

Product Description

The GL3 antibody reacts with the δ chain of the murine T cell receptor γ/δ (TCR γ/δ or TCR gamma/delta), a subtype of the TCR involved in the recognition of both peptide and lipid antigens. TCR γ/δ comprises a heterodimer (~ 80 kDa in humans) of disulfide-linked γ and δ subunits that associates with CD3 on the cell surface. It is a member of the immunoglobulin superfamily. TCR γ/δ is expressed on a subpopulation of T cells in the circulation but may be found on up to 50% of the T cells in epithelial cell-rich tissues. TCR γ/δ T cells have been identified in the thymus, epidermis, intestinal and pulmonary epithelia, peritoneum, peripheral lymphoid tissues, and reproductive organ mucosa. These cells have roles in oral and tumor-associated tolerance as well as autoimmune disease, and have been described as a link between the adaptive and innate immune responses. Once activated, they secrete effector cytokines in a subtype- and context-specific manner. Most γ/δ T cells are CD4-/CD8-, though some express CD8. A subset, known as dendritic epidermal T cells, are CD90+ (Thy-1+). The GL3 antibody recognizes an epitope in the constant region of the δ chain, and can reportedly activate TCR γ/δ + cells.

Target Antigen Name:	T Cell Receptor Gamma/Delta
Alternative Names:	Gamma/Delta TCR , gdTCR, TCRgd, TCR γ/δ , T cell receptor delta chain, T cell receptor gamma chain, T cell receptor γ/δ , T3D, T3G
Gene ID:	110066/110067
Species Reactivity:	Mouse
Host Species:	Hamster (Armenian)
Clonality:	Monoclonal
Clone:	GL3
Isotype:	IgG2, kappa
Immunogen:	Mouse (C57BL/6J) intra-epithelial lymphocytes
Conjugate:	FITC

Applications

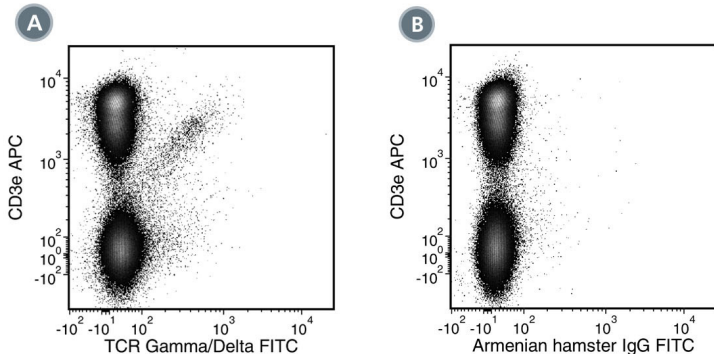
Verified:	FC
Reported:	FC, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep Mouse T Cell Isolation Kit (Catalog #19851).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 μL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of C57BL/6 mouse lymph node cells labeled with Anti-Mouse TCR Gamma/Delta Antibody, Clone GL3, FITC and Anti-Mouse CD3e Antibody, Clone 145-2C11, APC (Catalog #60015AZ).

(B) Flow cytometry analysis of C57BL/6 mouse lymph node cells labeled with an Armenian hamster IgG isotype control antibody, FITC and Anti-Mouse CD3e Antibody, Clone 145-2C11, APC.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

- Nian H et al. (2011) Activated gammadelta T cells promote the activation of uveitogenic T cells and exacerbate EAU development. *Invest Ophthalmol Vis Sci* 52(8): 5920–7. (FA/Activation)
- Kasten KR et al. (2010) Interleukin-7 (IL-7) treatment accelerates neutrophil recruitment through gamma delta T-cell IL-17 production in a murine model of sepsis. *Infect Immun* 78(11): 4714–22. (FC)
- Koenecke C et al. (2009) In vivo application of mAb directed against the gammadelta TCR does not deplete but generates “invisible” gammadelta T cells. *Eur J Immunol* 39(2): 372–9. (FA/Activation, FC)
- Stewart CA et al. (2007) Germ-line and rearranged Tcrd transcription distinguish bona fide NK cells and NK-like gammadelta T cells. *Eur J Immunol* 37(6): 1442–52. (FC)
- Cardona AE et al. (2003) CC chemokines mediate leukocyte trafficking into the central nervous system during murine neurocysticercosis: role of gamma delta T cells in amplification of the host immune response. *Infect Immun* 71(5): 2634–42. (IF, IHC)
- Skelsey ME et al. (2001) Gamma delta T cells are needed for ocular immune privilege and corneal graft survival. *J Immunol* 166(7): 4327–33. (FA/Blocking, FC)
- Yañez DM et al. (1999) Gamma delta T-cell function in pathogenesis of cerebral malaria in mice infected with *Plasmodium berghei* ANKA. *Infect Immun* 67(1): 446–8. (Depletion)
- Skeen MJ & Ziegler HK. (1993) Induction of murine peritoneal gamma/delta T cells and their role in resistance to bacterial infection. *J Exp Med* 178(3): 971–84. (Depletion, FC)
- Goodman T et al. (1992) A T-cell receptor gamma delta-specific monoclonal antibody detects a V gamma 5 region polymorphism. *Immunogenetics* 35(1): 65–8. (FC)
- Goodman T & Lefrancois L. (1989) Intraepithelial lymphocytes. Anatomical site, not T cell receptor form, dictates phenotype and function. *J Exp Med* 170(5): 1569–81. (FA, FC, IP)

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