

PE/Elab Fluor® 594 Anti-Mouse Ly-49C/I Antibody[5E6]

Catalog Number: AN00659P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Reactivity	Mouse
Host	mouse
Isotype	mouse IgG2a, κ
Clone No.	5E6
Isotype Control	PE/Elab Fluor® 594 Mouse IgG2a, κ Isotype Control[C1.18.4] [Product E-AB-F09802P]
Conjugation	PE/Elab Fluor® 594
Conjugation Information	PE/Elab Fluor® 594 is designed to be excited by the blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 620 nm (e.g., a 610/20 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

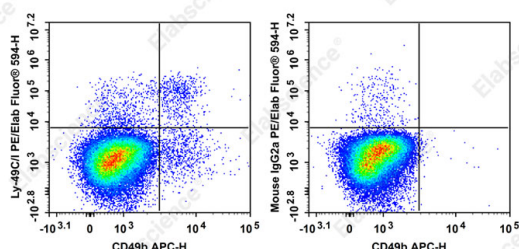
Applications

Recommended usage

FCM

Each lot of this antibody is quality control tested by flow cytometric analysis. **The amount of the reagent is suggested to be used 5 µL of antibody per test (million cells in 100 µL staining volume or per 100 µL of whole blood).** Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.

Data



Staining of C57BL/6 murine splenocytes cells with APC Anti-Mouse CD49b Antibody and PE/Elab Fluor® 594 Anti-Mouse Ly-49C/I Antibody[5E6] (left) or PE/Elab Fluor® 594 Mouse IgG2a, κ Isotype Control (right). Total viable cells were used for analysis.

Preparation & Storage

Storage	Keep as concentrated solution. This product can be stored at 2-8°C for 24 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag

Antigen Information

Alternate Names	Basigin,BSG,5F7,Collagenase stimulatory factor,Extracellular matrix metalloproteinase inducer,EMMPRIN,Leukocyte activation antigen M6,OK blood group antigen,Tumor cell-derived collagenase stimulatory factor,TCSF,CD147
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Rev. V1.4

Uniprot ID

Q64329;Q2TJJ8

Gene ID

16634;16640

Background

The 5E6 (also known as clone SW5E6) antibody reacts with Ly-49C[BALB], Ly-49C[B6], Ly-49C[NZB], and Ly-49I[B6], inhibitory receptors which are expressed on subsets of natural killer (NK) cells and NK-1.1+ (or DX5+) T lymphocytes (NK-T cells) in all strains tested except C57BR and RIII, on a population of memory CD8+ T lymphocytes and NK1.1+ $\gamma\delta$ T cells in C57BL/6 mice, and on a distinct subset of B-1 cells of BALB/c and C57BL/6 mice. The proportion of NK T cells expressing Ly-49C/I is higher (2-5 fold) in thymus than in liver (immature and mature NK T cells, respectively), and there is evidence that the down-regulation of Ly-49 receptor expression is necessary for normal NK T-cell development. Most NK cells express a single allele of Ly-49C, although occasionally they may express more than one allele. The Ly-49 family of NK-cell receptors are disulfide-linked type-II transmembrane protein homodimers with extracellular carbohydrate-recognition domains (CRD) that bind to MHC class I alloantigens. The Ly-49 family members are expressed independently, such that an individual NK or T cell may display more than one class of Ly-49 receptor homodimers. The 5E6 antibody is specific for the Ly-49C CRD. The Ly-49C[BALB] and Ly-49C[B6] alloantigens bind to MHC class I antigens of the b, d, k, and s haplotypes, and the 5E6 antibody blocks this binding. Binding of Ly-49C[BALB]- and Ly-49C[B6]- expressing transfectants to lymphoblasts of H-2[f], H-2[q], H-2[r], and H-2[v] strains has also been detected. Ly-49I[B6] transfectants bind H-2[r] lymphoblasts and bind much more weakly to the b, d, k, q, s, and v haplotypes. The levels of the Ly-49 inhibitory receptors are down-regulated by their ligands in vivo, and the various levels of expression of an Ly-49 inhibitory receptor may affect the specificity of NK cells. Ly-49C is specifically downregulated in the presence of H-2K[b] class I molecules (one of the Ly-49C ligand s). Ly-49C[+] and/or Ly-49I[+] cells mediate allogeneic and hybrid resistance to H-2d bone marrow transplantation. In vitro and in vivo studies suggest that the Ly-49C and/or Ly-49I receptors mediate negative regulation of NK-cell cytolytic activity via tyrosine phosphorylation of their ITIMs (Immunoreceptor Tyrosine-based Inhibitory Motifs).