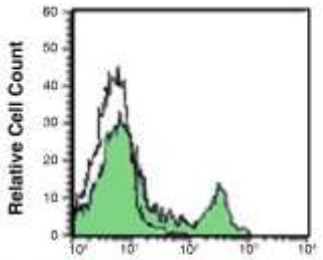
Leinco Technologies, Inc.
excellence in early discovery research™

Anti-Mouse CD8a (Ly 2)

Purified *in vivo* PLATINUM™ Functional Grade Monoclonal Antibody



Staining of C57 splenocytes with 0.1 µg of Rat IgG2a Isotype Control (open histogram) or 0.1 µg of Purified Rat Anti-CD8a clone 53-6.7 (green histogram) followed by Goat F(ab')2 Anti-Rat IgG (H&L)-FITC (Leinco Prod. No. R120).

Product Information

Product No.: C2848
Clone: 53-6.7
RRID: AB_2829603
Isotype: Rat IgG2a κ
Storage: Sterile 2-8°C

Product Description

Specificity

Clone 53-6.7 recognizes Lyt 2. Clone 53-6.7 competes with clone 5H10-1 for binding to thymocytes.

Antigen Distribution

Lyt 2 is present on the surface of most thymocytes and a subpopulation of mature T-lymphocytes which include most T suppressor/cytotoxic cells.

Background

CD8 is made up of disulfide-linked α and β chains that form the α(CD8a)/β(CD8b) heterodimer and α/α homodimer. CD8 is part of the Ig superfamily that expresses primarily as CD8a homodimers. CD8a is a 32-34 kD type I glycoprotein that can also form heterodimers with CD8b. CD8 is an antigen co-receptor on T cells that mediates efficient cell to cell interactions within the immune system. CD8 coupled with the T cell receptor on the T lymphocyte recognizes an antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The CD8 co-receptor also plays a role in T cell signaling by interacting with Lck (lymphocyte-specific protein tyrosine kinase) which leads to the activation of transcription factors that affect the expression of certain genes.

Known Reactivity Species

Mouse

Format

Purified in vivo Functional Grade, in vivo PLATINUM™

Immunogen

Mouse thymus or spleen

Formulation

This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥98% monomer by analytical SEC, >95% by SDS Page

Endotoxin

<0.5 EU/mg as determined by the LAL method

Storage and Stability

Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C. **Avoid Repeated Freeze Thaw Cycles.**

Product Preparation
Functional grade preclinical antibodies are manufactured in an animal free facility using *in vitro* cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing
To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's Purified Functional PLATINUM™ antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications
Applications and Recommended Usage (Quality Tested By Leinco):
FC The suggested concentration for this 53-6.7 antibody for staining cells in flow cytometry is ≤ 0.25 µg per 10^6 cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.
WB The suggested concentration for this 53-6.7 antibody for use in western blotting is 1-10 µg/ml.
Other Applications Reported in Literature:
CyTOF®
PhenoCycler-Fusion (CODEX)®
IHC (Frozen)
IHC (Paraffin) Clone 53-6.7 has been reported for use in zinc-fixed paraffin-embedded sections and is NOT recommended for immunohistochemistry of formalin-fixed paraffin sections.
IP
B
Depletion

Country of Origin
USA

References
Sarmiento, M. *et al.* (1980) *Journal of Immunology* **125(6)**:2665