# Ly-6A/E (M-86): sc-134474



The Boures to Overtion

## **BACKGROUND**

The activity of natural killer (NK) cells is regulated by members of multiple receptor families that recognize MHC class I molecules, such as the killer cell inhibitory receptor/leukocyte immunoglobulin-like receptor (KIR/LIR) family and the C-type lectin superfamily. The Ly-6 alloantigens represent a family of phosphatidylinositol-anchored proteins that play a role in the process of T lymphocyte activation. Ly-6 expression is commonly induced on T and B lymphocytes after activation by mitogens. Ly-6A/E is a phosphatidylinositol-linked transmembrane member of the Ly-6 family that is produced in humans after 4 weeks of age. γ-interferon and TNF regulate Ly-6A/E at the level of transcription and mRNA stabilization in certain thymocytes and T-cells.

# **REFERENCES**

- 1. Ortega, G., Korty, P.E., Shevach, E.M. and Malek, T.R. 1986. Role of Ly-6 in lymphocyte activation. I. Characterization of a monoclonal antibody to a nonpolymorphic Ly-6 specificity. J. Immunol. 137: 3240-3246.
- Palfree, R.G., Dumont, F.J. and Hammerling, U. 1986. Ly-6A.2 and Ly-6E.1 molecules are antithetical and identical to MALA-1. Immunogenetics 23: 197-207.
- 3. Codias, E.K., Cray, C., Baler, R.D., Levy, R.B. and Malek, T.R. 1989. Expression of Ly-6A/E alloantigens in thymocyte and T-lymphocyte subsets: variability related to the Ly-6A and Ly-6B haplotypes. Immunogenetics 29: 98-107.
- 4. Malek, T.R., Danis, K.M. and Codias, E.K. 1989. Tumor necrosis factor synergistically acts with IFN-γ to regulate Ly-6A/E expression in T lymphocytes, thymocytes and bone marrow cells. J. Immunol. 142: 1929-1936.
- Codias, E.K. and Malek, T.R. 1990. Regulation of B lymphocyte responses to IL-4 and IFN-y by Ly-6A/E molecules. J. Immunol. 144: 2197-2204.
- 6. Moore, T., Bennett, M. and Kumar, V. 1995. Transplantable NK cell progenitors in murine bone marrow. J. Immunol. 154: 1653-1663.
- Ito, M., Anan, K., Misawa, M., Kai, S. and Hara, H. 1996. *In vitro* differentiation of murine Sca-1+Lin- cells into myeloid, B cell and T cell lineages. Stem Cells 14: 412-418.

## CHROMOSOMAL LOCATION

Genetic locus: Ly6a (mouse) mapping to 15 D3.

# **SOURCE**

Ly-6A/E (M-86) is a rabbit polyclonal antibody raised against amino acids 27-112 mapping within an internal region of Ly-6A/E of mouse origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

Ly-6A/E (M-86) is recommended for detection of Ly-6A/E, and to a lesser extent, with other Ly-6 family members of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

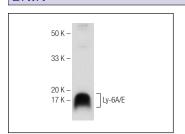
Molecular Weight of Ly-6A/E: 14 kDa.

Positive Controls: BW5147 cell lysate: sc-3800 or RAW 264.7 whole cell lysate: sc-2211.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit lgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit lgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit lgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit lgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# DATA



Ly-6A/E (M-86): sc-134474. Western blot analysis of Ly-6A/E expression in BW5147 whole cell lysate.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Ly-6A/E (D7): sc-52601**, our highly recommended monoclonal alternative to Ly-6A/E (M-86).

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