

Ly-6C (P-12): sc-23080

BACKGROUND

The gene encoding the mouse alloantigen, Ly-6C, maps to chromosome 15 and encodes a 131 amino acid protein that belongs to the Ly-6 family of glycosyl-phosphatidylinositol (GPI)-linked proteins. Ly-6 family members share amino acid homology throughout a distinctive cysteine rich protein domain that incorporates O-linked carbohydrates. Murine Ly-6 molecules have unique patterns of tissue expression during hematopoiesis from multipotential stem cells to lineage committed precursor cells, and on specific leukocyte subpopulations in the peripheral lymphoid tissues. Ly-6C is predominantly expressed on murine peripheral CD8 T cells. Ly-6C is involved in endothelial adhesion, the killing of target cells by CTLs, inducing TCR-mediated activation of IL-2 and IFN- γ production in CD8 T cells and the homing of CD8 T cells. In addition, Ly-6C may act as a signaling molecule of LFA-1 activation.

REFERENCES

1. Philbrick, W.M., et al. 1990. A recombination event in the 5' flanking region of the Ly-6C gene correlates with impaired expression in the NOD, NZB and ST strains of mice. *EMBO J.* 9: 2485-2492.
2. Classon, B.J. and Coverdale, L. 1994. Mouse stem cell antigen Sca-2 is a member of the Ly-6 family of cell surface proteins. *Proc. Natl. Acad. Sci. USA* 91: 5296-5300.

CHROMOSOMAL LOCATION

Genetic locus: Ly6c1 (mouse) mapping to 15 D3.

SOURCE

Ly-6C (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ly-6C of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23080 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ly-6C (P-12) is recommended for detection of Ly-6C of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for Ly-6C siRNA (m): sc-42943, Ly-6C shRNA Plasmid (m): sc-42943-SH and Ly-6C shRNA (m) Lentiviral Particles: sc-42943-V.

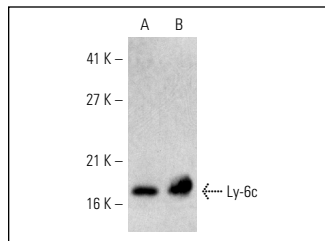
Molecular Weight of Ly-6C: 14-16 kDa.

Positive Controls: BW5147 cell lysate: sc-3800 or mouse lymph node extract: sc-364243.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Ly-6c (P-12): sc-23080. Western blot analysis of Ly-6c expression in BW5147 whole cell lysate (A) and mouse lymph node tissue extract (B).

SELECT PRODUCT CITATIONS

1. Zhang, Q., et al. 2014. Interleukin-17 promotes development of castration-resistant prostate cancer potentially through creating an immunotolerant and pro-angiogenic tumor microenvironment. *Prostate* 74: 869-879.

STORAGE

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

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.


 MONOS
Satisfaction
Guaranteed

Try **Ly-6C (G-3): sc-271811** or **Ly-6C (ER-MP20): sc-52650**, our highly recommended monoclonal alternatives to Ly-6C (P-12).