

Ly-6H (P-14): sc-87280

BACKGROUND

The Ly-6 (lymphocyte antigen 6) alloantigens represent a family of phosphatidylinositol-anchored proteins that play a role in the process of T lymphocyte activation. Ly-6 family members share amino acid homology throughout a distinctive cysteine rich protein domain that incorporates O-linked carbohydrates. During hematopoiesis, murine Ly-6 molecules have unique patterns of tissue expression, from multipotential stem cells to lineage committed precursor cells, and on specific leukocyte subpopulations in the peripheral lymphoid tissues. Ly-6H (lymphocyte antigen 6H), also known as NMLY6, is a 140 amino acid lipid-anchored membrane protein that belongs to the Ly-6 family. Highly expressed in brain with lower expression in pancreas, testis, colon and small intestine, Ly-6H participates in the activation of T lymphocytes. Overexpression of Ly-6H is detected in certain acute human leukemic cell lines (such as MOLT-3), suggesting a possible role for Ly-6H in carcinogenesis.

REFERENCES

1. LeClair, K.P., et al. 1986. Isolation of a murine Ly-6 cDNA reveals a new multigene family. *EMBO J.* 5: 3227-3234.
2. Rock, K.L., et al. 1989. The LY-6 locus: a multigene family encoding phosphatidylinositol-anchored membrane proteins concerned with T-cell activation. *Immunol. Rev.* 111: 195-224.
3. Horie, M., et al. 1998. Isolation and characterization of a new member of the human Ly6 gene family (LY6H). *Genomics* 53: 365-368.
4. Apostolopoulos, J., et al. 1999. Identification of mouse Ly6H and its expression in normal tissue. *Immunogenetics* 49: 987-990.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603625. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Flanagan, K., et al. 2008. Intestinal epithelial cell up-regulation of LY6 molecules during colitis results in enhanced chemokine secretion. *J. Immunol.* 180: 3874-3881.

CHROMOSOMAL LOCATION

Genetic locus: LY6H (human) mapping to 8q24.3; Ly6h (mouse) mapping to 15 D3.

SOURCE

Ly-6H (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ly-6H of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-87280 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Ly-6H (P-14) is recommended for detection of Ly-6H of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Ly-6H (P-14) is also recommended for detection of Ly-6H in additional species, including equine and canine.

Suitable for use as control antibody for Ly-6H siRNA (h): sc-77516, Ly-6H siRNA (m): sc-149160, Ly-6H shRNA Plasmid (h): sc-77516-SH, Ly-6H shRNA Plasmid (m): sc-149160-SH, Ly-6H shRNA (h) Lentiviral Particles: sc-77516-V and Ly-6H shRNA (m) Lentiviral Particles: sc-149160-V.

Molecular Weight of Ly-6H: 15 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

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) 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.

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-6H (MN-7): sc-100285**, our highly recommended monoclonal alternative to Ly-6H (P-14).