

Ly-6H (MN-7): sc-100285

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., Palfree, R.G., Flood, P.M., Hammerling, U. and Bothwell, A. 1986. Isolation of a murine Ly-6 cDNA reveals a new multigene family. *EMBO J.* 5: 3227-3234.
2. Rock, K.L., Reiser, H., Bamezai, A., McGrew, J. and Benacerraf, B. 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., Okutomi, K., Taniguchi, Y., Ohbuchi, Y., Suzuki, M. and Takahashi, E. 1998. Isolation and characterization of a new member of the human Ly-6 gene family (LY6H). *Genomics* 53: 365-368.
4. Apostolopoulos, J., Chisholm, L.J. and Sandrin, M.S. 1999. Identification of mouse Ly-6H 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/>

CHROMOSOMAL LOCATION

Genetic locus: LY6H (human) mapping to 8q24.3.

SOURCE

Ly-6H (MN-7) is a mouse monoclonal antibody raised against recombinant Ly-6H of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain 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.

RESEARCH USE

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

APPLICATIONS

Ly-6H (MN-7) is recommended for detection of Ly-6H of human 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), immunohistochemistry (including paraffin-embedded sections) (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-6H siRNA (h): sc-77516, Ly-6H shRNA Plasmid (h): sc-77516-SH and Ly-6H shRNA (h) Lentiviral Particles: sc-77516-V.

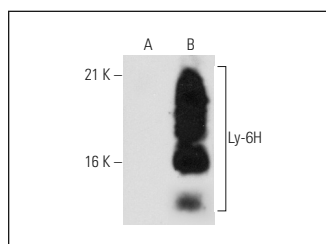
Molecular Weight of Ly-6H: 15 kDa.

Positive Controls: Ly-6H (h2): 293T Lysate: sc-114063 or K-562 whole cell lysate: sc-2203.

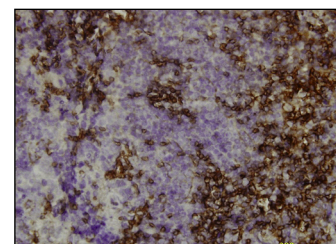
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Ly-6H (MN-7): sc-100285. Western blot analysis of Ly-6H expression in non-transfected: sc-117752 (A) and human Ly-6H transfected: sc-114063 (B) 293T whole cell lysates.



Ly-6H (MN-7): sc-100285. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane localization.

PROTOCOLS

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