

Ly-6K (I-14): sc-87282

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 sub-populations in the peripheral lymphoid tissues. Ly-6K (lymphocyte antigen 6 complex, locus K), also known as CO16, is a 165 amino acid protein that is both secreted and lipid-anchored to the cell membrane and contains one UPAR/Ly6 domain. Expressed specifically in testis, Ly-6K is thought to play a role in cell growth and may also be a potential marker for various types of carcinomas.

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. de Nooij-van Dalen, A.G., et al. 2003. Characterization of the human Ly-6 antigens, the newly annotated member Ly-6K included, as molecular markers for head-and-neck squamous cell carcinoma. *Int. J. Cancer* 103: 768-774.

CHROMOSOMAL LOCATION

Genetic locus: LY6K (human) mapping to 8q24.3.

SOURCE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87282 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.

PROTOCOLS

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

APPLICATIONS

Ly-6K (I-14) is recommended for detection of Ly-6K 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ly-6K siRNA (h): sc-77440, Ly-6K shRNA Plasmid (h): sc-77440-SH and Ly-6K shRNA (h) Lentiviral Particles: sc-77440-V.

Molecular Weight of Ly-6K: 27 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-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 IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Kong, H.K., et al. 2012. The regulatory mechanism of the LY6K gene expression in human breast cancer cells. *J. Biol. Chem.* 287: 38889-38900.

RESEARCH USE

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


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Try **Ly-6K (G-11): sc-393560**, our highly recommended monoclonal alternative to Ly-6K (I-14).