## BACKGROUND

The Ly-6 (lymphocyte antigen 6) alloantigens represent a family of phospha-tidylinositol-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 0 -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 phos-phatidylinositol-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 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C -terminus of Ly -6K of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-87281 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA}$ ).

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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 (C-13) is recommended for detection of Ly-6K of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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 1:301:3000).

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 MarkerTM compatible goat antirabbit 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.

## RESEARCH USE

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


Satisfation Guaranteed

Try Ly-6K (G-11): sc-393560, our highly recommended monoclonal alternative to Ly-6K (C-13).

