

Ly-6K (G-11): sc-393560

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.

CHROMOSOMAL LOCATION

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

SOURCE

Ly-6K (G-11) is a mouse monoclonal antibody raised against amino acids 1-165 representing full length Ly-6K of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ly-6K (G-11) is available conjugated to agarose (sc-393560 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393560 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393560 PE), fluorescein (sc-393560 FITC), Alexa Fluor® 488 (sc-393560 AF488), Alexa Fluor® 546 (sc-393560 AF546), Alexa Fluor® 594 (sc-393560 AF594) or Alexa Fluor® 647 (sc-393560 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393560 AF680) or Alexa Fluor® 790 (sc-393560 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

Ly-6K (G-11) is recommended for detection of Ly-6K of human origin by Western Blotting (starting dilution 1:100, 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-6K siRNA (h): sc-77440, Ly-6K shRNA Plasmid (h): sc-77440-SH and Ly-6K shRNA (h) Lentiviral Particles: sc-77440-V.

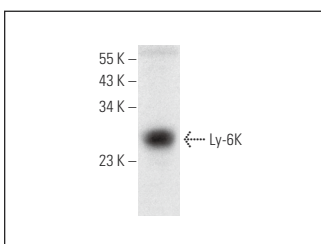
Molecular Weight of Ly-6K: 27 kDa.

Positive Controls: human testis extract: sc-363781.

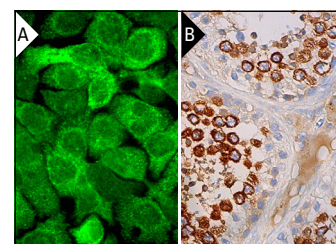
RECOMMENDED SUPPORT REAGENTS

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-6K (G-11): sc-393560. Western blot analysis of Ly-6K expression in human testis tissue extract.



Ly-6K (G-11): sc-393560. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells (B).

SELECT PRODUCT CITATION

1. Park, S., et al. 2023. Ly-6K depletion modulates TGF-β and EGF signaling. *Cancer Med.* 12: 12593-12607.

RESEARCH USE

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