SANTA CRUZ BIOTECHNOLOGY, INC.

Kell (M-100): sc-98862

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The KEL (CD238) gene encodes a type II transmembrane endopeptidase, Kell, that shares a consensus sequence with a large family of zinc-dependent endopeptidases. The Kell blood group protein is expressed primarily in the erythroid tissues and testis and with weaker expression in a large number of other tissues such as brain and lymphoid tissues. Immunohistochemistry reveals human Kell protein is localized to the Sertoli cells of the testis and the follicular dendritic cells of the spleen and tonsil. Kell is one of the major human surface antigens on red blood cells, where it is linked by a single disulfide bond to XK. The absence of XK, as occurs in the McLeod phenotype, is associated with a set of clinical symptoms that include nerve and muscle disorders and red cell acanthocytosis.

REFERENCES

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3. Camara-Clayette, V., Rahuel, C., Lopez, C., Hattab, C., Verkarre, V., Bertrand, O. and Cartron, J.P. 2001. Transcriptional regulation of the KEL gene and Kell protein expression in erythroid and non-erythroid cells. Biochem. J. 356: 171-180.
4. Yu, L.C., Twu, Y.C., Chang, C.Y. and Lin, M. 2001. Molecular basis of the Kell-null phenotype: a mutation at the splice site of human KEL gene abolishes the expression of Kell blood group antigens. J. Biol. Chem. 276: 10247-10252.
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6. Wagner, T., Lanzer, G. and Geissler, K. 2002. Kell expression on myeloid progenitor cells. Leuk. Lymphoma 43: 479-485.

CHROMOSOMAL LOCATION

Genetic locus: Kel (mouse) mapping to 6 B2.1.

SOURCE

Kell (M-100) is a rabbit polyclonal antibody raised against amino acids 170-269 mapping within an internal region of Kell of mouse origin.

PRODUCT

Each vial contains 200 µg IgG 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.

APPLICATIONS

Kell (M-100) is recommended for detection of Kell of mouse and rat 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 Kell siRNA (m): sc-72104, Kell shRNA Plasmid (m): sc-72104-SH and Kell shRNA (m) Lentiviral Particles: sc-72104-V.

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.

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.