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


CHROMOSOMAL LOCATION

Genetic locus: KEL (human) mapping to 7q34.

SOURCE

Kell (BRIC 203) is a mouse monoclonal antibody raised against erythrocytes of human origin.

PRODUCT

Each vial contains 200 µg IgG 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.

APPLICATIONS

Kell (BRIC 203) is recommended for detection of the Kell blood group antigen Kpbc and Kp (a+b+c) and Kp (a-b+c) erythrocytes of human origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with Ko erythrocytes.

Suitable for use as control antibody for Kell siRNA (h): sc-72103, Kell shRNA Plasmid (h): sc-72103-SH and Kell shRNA (h) Lentiviral Particles: sc-72103-V.

Molecular Weight of Kell: 120 kDa.

Positive Controls: TF-1 cell lysate: sc-2412, HeLa nuclear extract: sc-2120 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

RESEARCH USE

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

PROTOCOLS

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