SANTA CRUZ BIOTECHNOLOGY, INC.

XK (H-50): sc-99236

BACKGROUND

Kell and XK are two covalently linked plasma membrane proteins that constitute the Kell blood group system, a group of antigens on the surface of red blood cells that are important determinants of blood type and targets for autoimmune or alloimmune diseases. XK is a 444 amino acid protein that spans the membrane 10 times and carries the ubiquitous antigen, Kx, which determines blood type. XK also plays a role in the sodium-dependent membrane transport of oligopeptides and neutral amino acids. XK is expressed at high levels in brain, heart, skeletal muscle and pancreas. Defects in the XK gene cause McLeod syndrome (MLS), an X-linked multisystem disorder characterized by abnormalities in neuromuscular and hematopoietic system such as acanthocytic red blood cells and late-onset forms of muscular dystrophy with nerve abnormalities.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: XK (human) mapping to Xp21.1; Xk (mouse) mapping to X A1.1.

SOURCE

XK (H-50) is a rabbit polyclonal antibody raised against amino acids 1-50 mapping at the N-terminus of XK of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

XK (H-50) is recommended for detection of XK of mouse, rat and 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).

XK (H-50) is also recommended for detection of XK in additional species, including canine and porcine.

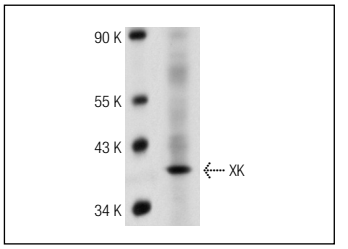
Suitable for use as control antibody for XK siRNA (h): sc-61807, XK siRNA (m): sc-61808, XK shRNA Plasmid (h): sc-61807-SH, XK shRNA Plasmid (m): sc-61808-SH, XK shRNA (h) Lentiviral Particles: sc-61807-V and XK shRNA (m) Lentiviral Particles: sc-61808-V.

Molecular Weight of XK: 40 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.

DATA



XK (H-50): sc-99236. Western blot analysis of XK expression in mouse liver tissue extract.

STORAGE

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

RESEARCH USE

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