

XKR7 (Y-15): sc-86025

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. The XK (X-linked Kx blood group)-related gene family are homologs of XK. XKR7 (XK-related protein 7) is a 579 amino acid multi-pass membrane protein that likely is a component of the XK/Kell complex of the Kell blood group system. The gene encoding XKR7 maps to human chromosome 20, which comprises approximately 2% of the human genome. Chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: XKR7 (human) mapping to 20q11.21; Xkr7 (mouse) mapping to 2 H1.

RESEARCH USE

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

SOURCE

XKR7 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of XKR7 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.

Blocking peptide available for competition studies, sc-86025 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

XKR7 (Y-15) is recommended for detection of XKR7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other XKR family members.

XKR7 (Y-15) is also recommended for detection of XKR7 in additional species, including canine and bovine.

Suitable for use as control antibody for XKR7 siRNA (h): sc-76935, XKR7 siRNA (m): sc-155376, XKR7 shRNA Plasmid (h): sc-76935-SH, XKR7 shRNA Plasmid (m): sc-155376-SH, XKR7 shRNA (h) Lentiviral Particles: sc-76935-V and XKR7 shRNA (m) Lentiviral Particles: sc-155376-V.

Molecular Weight of XKR7: 64 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° 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.