



XTES (N-18): sc-55054

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 ten 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. XTES, also known as XKR3 (XK-related protein 3) or XRG3, is a 459 amino acid homolog of XK and is expressed predominately, if not exclusively, in testis. Localized to the cell membrane, XTES contains ten transmembrane regions and a large second exoplasmic loop; both features consistent with the XK family structure.

REFERENCES

1. Lee, S., Russo, D. and Redman, C.M. 2000. The Kell blood group system: Kell and XK membrane proteins. *Semin. Hematol.* 37: 113-121.
2. Lee, S., Russo, D. and Redman, C. 2000. Functional and structural aspects of the Kell blood group system. *Transfus. Med. Rev.* 14: 93-103.
3. Singleton, B.K., Green, C.A., Renaud, S., Fuhr, P., Poole, J. and Daniels, G.L. 2003. McLeod syndrome resulting from a novel XK mutation. *Br. J. Haematol.* 122: 682-685.
4. Pu, J.J., Redman, C.M., Visser, J.W. and Lee, S. 2005. Onset of expression of the components of the Kell blood group complex. *Transfusion* 45: 969-974.
5. Calenda, G., Peng, J., Redman, C.M., Sha, Q., Wu, X. and Lee, S. 2006. Identification of two new members, XPLAC and XTES, of the XK family. *Gene* 370: 6-16.
6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611674. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: XKR3 (human) mapping to 22q11.1.

SOURCE

XTES (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of XTES 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-55054 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

XTES (N-18) is recommended for detection of XTES of 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).

Suitable for use as control antibody for XTES siRNA (h): sc-63230.

Molecular Weight of XTES: 40 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.

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.