

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kell in Western blots. In this format, approximately 35% cross-reactivity with recombinant mouse Kell is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Kell aa 68-732
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Kell

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Kell, a type II membrane glycoprotein, is linked through a single disulfide bond to XK, a putative membrane transporter. The two proteins constitute the Kell blood group antigens (1). Kell is a zinc endopeptidase of the neprilysin (NEP) family which also includes endothelin converting enzymes (ECE-1 and ECE-2), PEX, XCE, DINE and several NEP-like proteins (2). It has been shown to cleave big endothelin-3 (ET-3) at Trp21-Ile22, yielding ET-3, and to a much lesser extent, big ET-1 and big ET-2 at Trp21-Val22, yielding ET-1 and ET-2 (3). Several different molecular defects cause the Kell null phenotype, which has no obvious clinical outcome (4).

References:

1. Lee, S. *et al.* (2000) *Transfus. Med. Rev.* **14**:93.
2. Turner, A.J. *et al.* (2001) *BioEssays.* **23**:261.
3. Lee, S. *et al.* (1999) *Blood* **94**:1440.
4. Lee, S. *et al.* (2001) *J. Biol. Chem.* **276**:27281.