

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Kell in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant mouse Kell is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Kell aa 68-732
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Kell
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	Human whole blood
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Kell, <a href="#">see our available Western blot detection antibodies</a>
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

#### PREPARATION AND STORAGE

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

#### 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.