

## DESCRIPTION

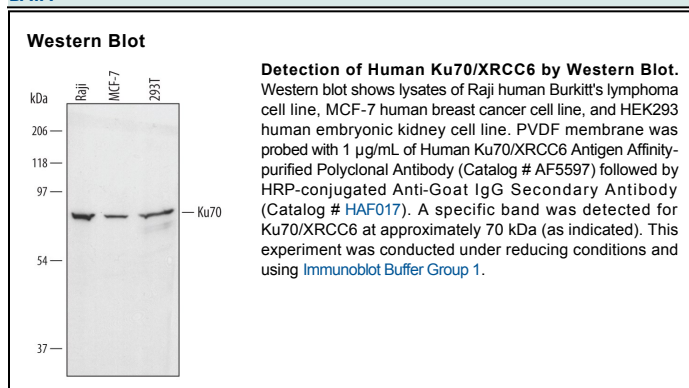
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human Ku70 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Ku70 Asn405-Lys556 Accession # P12956
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## 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

Ku70 (Lupus Ku autoantigen protein 70; also ATP-dependent DNA helicase 2 subunit 1) is a ubiquitous 70-75 kDa nuclear protein that serves as a component of the DNA-dependent protein kinase complex DNA-PK. In particular, it heterodimerizes with Ku80 to form a complex that binds DNA ends and select sequences, and which recruits DNA-PKcs for the purpose of phosphorylating multiple chromatin-bound proteins, including p53, Oct-1 and Sp-1. The Ku:DNA-PKcs complex participates in DNA repair, DNA replication, and VDJ recombination. Human Ku70 is 609 amino acids (aa) in length. It contains a Ku core domain (aa 266-529), a DNA binding motif (aa 268-274), an NLS (aa 539-556) and a C-terminal SAP domain (aa 573-607). There is one potential splice form that shows a deletion of aa 66-106. Over aa 405-556, Ku70 shares 83% aa identity with mouse Ku70.