

Human Ku70/XRCC6 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5597

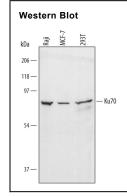
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects endogenous human Ku70 in Western blots.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human Ku70 Asn405-Lys556 Accession # P12956	
Formulation	Lyophilized from a 0.2 µm filtered solution 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
Western Blot	1 μg/mL	See Below

DATA



Detection of Human Ku70/XRCC6 by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, MCF-7 human breast cancer cell line, and HEK293 human embryonic kidney cell line. PVDF membrane was probed with 1 µg/mL of Human Ku70/XRCC6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5597) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Ku70/XRCC6 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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.		
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
	Sman pack size (-3-7) is simpled with polar packs. Opon receipt, store it immediately at -20 to -70 C		

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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

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.

