

Human Rad50 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF4996

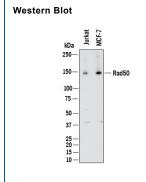
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Rad50 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human Rad50 Leu518-Leu881 Accession # Q92878
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

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 Rad50 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cells and MCF-7 human breast cancer cells. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Rad50 Antigen Affinitypurified Polyclonal Antibody (Catalog # AF4996) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Rad50 at approximately ~150kDa kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot 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.	
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

Rad50 is a 150 kDa member of the Rad50 subfamily, SMC (structural maintenance of chromosomes) family of DNA-associated genes. It is ubiquitously expressed, and associates with MRE11 and NBS1 to form an MRN complex. This complex stabilizes ATM kinase, thus contributing to DNA repair, and also participates in the suppression of DNA rereplication in dividing cells. Human Rad50 is 1312 amino acids (aa) in length. It has an apparent ATP binding site (aa 36-43) plus a coiled-coil region (aa 228-598) followed by a "zinc-hook" domain (aa 635-734) that mediates homodimerization. There are multiple splice variants. An alternate start site exists at Met140, there is a single Lys substitution for aa 723-1312, and three Lys substitute for aa 555-1312. Over aa 518-881, human Rad50 is 96% aa identical to mouse Rad50.

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