

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Ku80 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Ku80 Asn402-Lys565 Accession # P13010
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Ku80 (Lupus Ku autoantigen protein p86; also ATP-dependent DNA helicase 2 subunit 2 and Ku86) is a ubiquitous 80 - 85 kDa nuclear protein that serves as a component of DNA-dependent protein kinase. In particular, it heterodimerizes with Ku70 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 Ku80 is 732 amino acids (aa) in length. It contains a Ku domain (aa 244 - 543) with a DNA binding motif (aa 257 - 268), and a C-terminal DNA-PKcs-binding sequence (aa 720 - 728). Over aa 402 - 565, Ku80 shares 77% aa identity with mouse Ku80.

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