

## Product datasheet for **AP20349PU-N**

### **Ku70 (XRCC6) Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to the N-terminus of Human Ku-70.
Specificity:	This antibody detects endogenous levels of Ku70 protein.
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 70 kDa
Gene Name:	X-ray repair complementing defective repair in Chinese hamster cells 6
Database Link:	<a href="#">Entrez Gene 14375 Mouse</a> <a href="#">Entrez Gene 2547 Human</a> <a href="#">P12956</a>



[View online »](#)

**Background:**

The Ku protein is localized in the nucleus and is composed of subunits referred to as Ku-70 (or p70) and Ku-86 (or p86), which is also known by the synonym Ku-80 (or p80). Ku was first described as an autoantigen to which antibodies were produced in a patient with scleroderma-polymyositis overlap syndrome, and was later found in the sera of patients with other rheumatic diseases. Both subunits of the Ku protein have been cloned, and a number of functions have been proposed for Ku, including cell signaling, DNA replication and transcriptional activation. Ku is involved in Pol II-directed transcription by virtue of its DNA-binding activity, serving as the regulatory component of the DNA-associated protein kinase that phosphorylates Pol II and transcription factor Sp. Ku proteins also activate transcription from the U1 small nuclear RNA and the human transferrin receptor gene promoters. A Ku-related protein designated the enhancer 1 binding factor (E1BF), composed of two subunits, has been identified as a positive regulator of RNA polymerase I transcription initiation.

**Synonyms:**

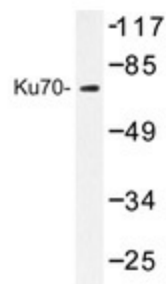
G22P1, TLAA, CTCBF, CTC75

**Protein Families:**

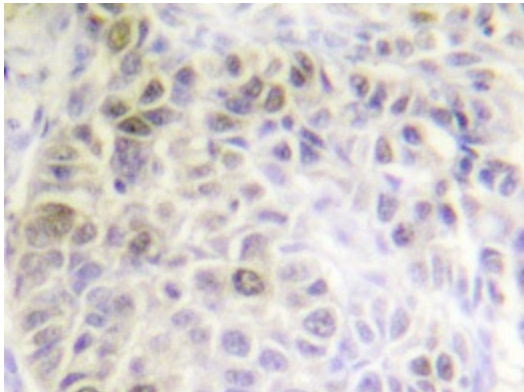
Druggable Genome, Transcription Factors

**Protein Pathways:**

Non-homologous end-joining

**Product images:**

Western blot analysis of Ku70 antibody in extracts from HeLa cells.



Immunohistochemistry analyzes of Ku70 antibody in paraffin-embedded human liver carcinoma tissue.