

## Datasheet: VMA00013KT

<b>Description:</b>	Ku70 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	Ku70
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Isotype:</b>	HuCAL Fab bivalent
<b>Quantity:</b>	2 Westerns

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

#### Target Species

Human

#### Product Form

A bivalent human recombinant Fab selected from the HuCAL<sup>®</sup> GOLD phage display library, expressed in *E. coli*. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with myc-tag (EQKLISEEDL) and a double extended Strep-tag at the C-terminus of the antibody heavy chain. This product is supplied as a liquid.

#### Preparation

20µl Recombinant human monoclonal antibody purified by metal chelate affinity chromatography

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)

#### Immunogen

Human Ku70 - N1 fusion protein

**External Database  
Links**

**UniProt:**

[P12956](#)   [Related reagents](#)

**Entrez Gene:**

[2547](#)   XRCC6   [Related reagents](#)

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**Synonyms**

G22P1

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**Specificity**

**Human anti Human Ku70 antibody** recognizes Human Ku70, also known as X-ray repair cross-complementing protein 6 or XRCC6. Ku70 is a 609 amino acid, nuclear protein involved in DNA damage repair. Ku70 contains a single [Ku domain](#) and a single [SAP domain](#).

Ku70 forms a heterodimer comprising of p70/p86 which acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA. Research indicates that the Ku p70/p86 dimer is probably involved in stabilizing broken DNA ends and bringing them together ([Walker et al. 2001](#)).

Human anti Human Ku70 antibody recognizes human Ku70 as a single band of ~70 kDa in multiple human cell line lysates by western blotting under reducing conditions.

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**Western Blotting**

Anti Ku70 antibody detects a band of approximately 70 kDa in HeLa cell lysates.

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**Instructions For Use**

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

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**Lysate Composition**

400µg HeLa lysate lyophilized in RIPA buffer.

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**Lysate Reconstitution**

- If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.  
- If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.  
Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

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**Storage**

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

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**Guarantee**

As supplied, 12 months from date of despatch.

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**Acknowledgements**

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 #10561 available at:  
Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>  
Lysate Material (10561): <https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf>

## Related Products

### Recommended Secondary Antibodies

Mouse Anti Synthetic Peptide STREP-TAG CLASSIC (MCA2489...) [HRP](#)

Goat Anti Human IgG F(ab')<sub>2</sub> (STAR126...) [HRP](#)

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Look out for updates on how to access your digital version at [bio-rad-antibodies.com](http://bio-rad-antibodies.com)

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