

## Datasheet: MCA2708

<b>Description:</b>	MOUSE ANTI HUMAN Ku80
<b>Specificity:</b>	Ku80
<b>Other names:</b>	XRCC5
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-54
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 mg

## 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
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation	■			
Western Blotting	■			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Human T lymphocytes.
<b>External Database Links</b>	<b>UniProt:</b>

[P13010](#)   [Related reagents](#)

**Entrez Gene:**

[7520](#)   XRCC5   [Related reagents](#)

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<b>Synonyms</b>	G22P2
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<b>Specificity</b>	<p><b>Mouse anti Human Ku80 antibody, clone MEM-54</b> recognizes the 80 kDa subunit of human Ku protein, an evolutionarily conserved nuclear ATP-dependent DNA helicase, involved in a major proportion of DNA repair and in V(D)J recombination.</p> <p>The Ku protein, originally described as an autoantigen, exists as a tightly associated heterodimer consisting of a 70 kDa (Ku70) and 80 kDa (Ku80) subunit which binds to DNA double-strand break ends (DSB). DNA bound Ku recruits the large catalytic subunit DNA-PKcs to form the DNA-dependent protein kinase complex DNA-PK, facilitating DNA repair by the non-homologous end-joining (NHEJ) pathway.</p> <p>Mouse anti Human Ku80 antibody, clone MEM-54 is suitable for use in western blotting (<a href="#">Jayaram et al. 2008</a>).</p>
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<b>References</b>	<ol style="list-style-type: none"><li>Jayaram, S. <i>et al.</i> (2008) Loss of DNA ligase IV prevents recognition of DNA by double-strand break repair proteins XRCC4 and XLF. <a href="#">Nucleic Acids Res. 36: 5773-86.</a></li><li>Krais, A.M. <i>et al.</i> (2011) CHRNA5 as negative regulator of nicotine signaling in normal and cancer bronchial cells: effects on motility, migration and p63 expression. <a href="#">Carcinogenesis. 32 (9): 1388-95.</a></li></ol>
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<b>Further Reading</b>	<ol style="list-style-type: none"><li>Koike, M. (2002) Dimerization, translocation and localization of Ku70 and Ku80 proteins. <a href="#">J Radiat Res. 43 (3): 223-36.</a></li></ol>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR76...)   [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#), [DyLight@649](#), [DyLight@680](#), [DyLight@800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...)   [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

## **Recommended Negative Controls**

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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