

## Datasheet: MCA4627GA

<b>Description:</b>	MOUSE ANTI HUMAN HEAT SHOCK PROTEIN 70
<b>Specificity:</b>	HEAT SHOCK PROTEIN 70
<b>Other names:</b>	HSP70
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	4E7
<b>Isotype:</b>	IgG1
<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 (1)	▪			1/100 - 1/200
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/500 - 1/2000

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from ascities
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.02% Sodium Azide (NaN <sub>3</sub> ), 10% Glycerol

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant human HSP70 (amino acids 1-641) purified from <i>Escherichia coli</i> .
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08107</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3304</a>    HSPA1B    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	HSPA1
<b>RRID</b>	AB_2119667
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human heat shock protein 70 antibody, clone 4E7</b> recognises human heat shock protein 70 (HSP70), a member of the highly related HSP70 family, which range in size from ~66-78 kDa.</p> <p>Heat shock proteins are a group of heat- or stress-inducible proteins which act as molecular chaperones and as essential regulators of cellular processes, including protein folding. HSP70 acts alongside other chaperones to mediate the folding of newly-synthesized peptide sequences, stabilize proteins against aggregation, and assist in protein transmembrane transport.</p>
<b>Histology Positive Control Tissue</b>	Eccrine glands in Human skin.
<b>Western Blotting</b>	MCA4627GA detects a band of approximately 70 kDa in HeLa cell lysates.
<b>References</b>	1. Dalli J <i>et al.</i> (2013) Heterogeneity in neutrophil microparticles reveals distinct proteome and functional properties. <a href="#">Mol Cell Proteomics. 12 (8): 2205-19.</a>
<b>Further Reading</b>	1. Tavaría, M. <i>et al.</i> (1996) A hitchhiker's guide to the human Hsp70 family. <a href="#">Cell stress and Chaperones 1: 23-28.</a>
<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>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety</b>	Material Safety Datasheet documentation #20359 available at:

**Information** 20359: <https://www.bio-rad-antibodies.com/uploads/MSDS/20359.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<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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