

Datasheet: MCA4627GA

Description:	MOUSE ANTI HUMAN HEAT SHOCK PROTEIN 70
Specificity:	HEAT SHOCK PROTEIN 70
Other names:	HSP70
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4E7
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from ascities
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide (NaN ₃), 10% Glycerol
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human HSP70 (amino acids 1-641) purified from <i>Escherichia coli</i> .

**External Database
Links**

UniProt:

[P08107](#) [Related reagents](#)

Entrez Gene:

[3304](#) HSPA1B [Related reagents](#)

Synonyms

HSPA1

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.

Specificity

Mouse anti Human heat shock protein 70 antibody, clone 4E7 recognises human heat shock protein 70 (HSP70), a member of the highly related HSP70 family, which range in size from ~66-78 kDa.

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.

**Histology Positive
Control Tissue**

Eccrine glands in Human skin.

Western Blotting

MCA4627GA detects a band of approximately 70 kDa in HeLa cell lysates.

References

1. Dalli J *et al.* (2013) Heterogeneity in neutrophil microparticles reveals distinct proteome and functional properties. [Mol Cell Proteomics. 12 \(8\): 2205-19.](#)

Further Reading

1. Tavaría, M. *et al.* (1996) A hitchhiker's guide to the human Hsp70 family. [Cell stress and Chaperones 1: 23-28.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
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.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #20359 available at:
20359: <https://www.bio-rad-antibodies.com/uploads/MSDS/20359.pdf>

Regulatory

For research purposes only

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
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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