

## Mouse Anti-HSP70 antibody

SLM-33048M

**Product Name** HSP70

**Chinese Name** 热休克蛋白-70 单克隆抗体

**Alias**

HSP-70; HSP 70; Heat shock 70 kDa protein 1; heat shock 70kDa protein 1A; Heat shock 70kDa protein 1B; Heat shock induced protein; heat shock protein 70; HSP70 1; HSP70 2; HSP70.1; HSP72; HSPA1; HSPA1A; HSPA1B; XXbac BCX40G17.3 001; Heat shock 70 kDa protein 1A/1B; HSP71A\_HUMAN; Hspa1a; Hsp70-1; HSP72; Hspa1; Hspa1b; Heat shock 70 kDa protein 1A/1B; shock 70 kDa protein 1/2; HSP70-1/HSP70-2; HSP70.1/HSP70.2.

**Research Area**

Tumour Signal transduction transcriptional regulatory factor

**Immunogen Species**

Mouse

**Clonality**

Monoclonal

**Clone NO.**

5G10

**React Species**

Human, Mouse, Rat,

**Applications**

WB=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight**

70kDa

**Cellular localization**

cytoplasmic

**Form**

Liquid

**Concentration**

1mg/ml

**immunogen**

KLH conjugated synthetic peptide derived from human Hsp70

**Lsotype**

IgG

**Purification**

affinity purified by Protein G

**Buffer Solution**

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.



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<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a> This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008].
	<b>Function:</b> In cooperation with other chaperones, Hsp70s stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In case of rotavirus A infection, serves as a post-attachment receptor for the virus to facilitate entry into the cell.
<b>Product Detail</b>	<b>Subunit:</b> Component of the CatSper complex. Identified in a mRNP granule complex, at least composed of ACTB, ACTN4, DHX9, ERG, HNRNPA1, HNRNPA2B1, HNRNPAB, HNRNPD, HNRNPL, HNRNPR, HNRNPU, HSPA1, HSPA8, IGF2BP1, ILF2, ILF3, NCBP1, NCL, PABPC1, PABPC4, PABPN1, RPLP0, RPS3, RPS3A, RPS4X, RPS8, RPS9, SYNCRIP, TROVE2, YBX1 and untranslated mRNAs. Interacts with TSC2. Interacts with IRAK1BP1. Interacts with TERT; the interaction occurs in the absence of the RNA component, TERC, and dissociates once the TERT complex has formed. Interacts with DNAJC7. Interacts with CHCHD3.  <b>Subcellular Location:</b> Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.  <b>Tissue Specificity:</b> HSPA1B is testis-specific.  <b>Similarity:</b> Belongs to the heat shock protein 70 family.

**SWISS:**  
P0DMV8

**Gene ID:**  
3303

**Database links:**

[Entrez Gene: 281825](#) Cow

[Entrez Gene: 3303](#) Human

[Entrez Gene: 3304](#) Human

[Entrez Gene: 15511](#) Mouse

[Entrez Gene: 193740](#) Mouse

[Entrez Gene: 24472](#) Rat

[Entrez Gene: 294254](#) Rat

[Omim: 140550](#) Human

[Omim: 603012](#) Human

[SwissProt: Q27975](#) Cow

[SwissProt: P0DMV8](#) Human

[SwissProt: P0DMV9](#) Human

[SwissProt: P17879](#) Mouse

[SwissProt: Q61696](#) Mouse

[SwissProt: Q07439](#) Rat

[Unigene: 274402](#) Human

[Unigene: 719966](#) Human

[Unigene: 728810](#) Human

[Unigene: 1950](#) Rat

Unigene: 228225 Rat

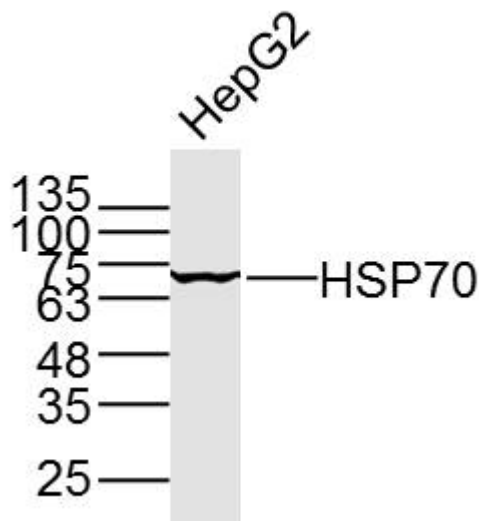
信号传导 (Signaling Intermediates)

HSP-70 是细胞受应激原刺激后诱导产生的一组应激蛋白，与 Tumour 发生、增殖及分化有关。

环境和病理性应激原均可导致肌体合成一组应急蛋白既热休克蛋白。许多热休克蛋白，包括 HSP70 家族成员，均参与蛋白的变性-复性、折叠-解折叠、运输-易位、活化-非活化和分泌等过程。

HSP70 与类固醇受体、肌动蛋白、P53 等蛋白密切相关。HSP70 还参与热应激原、细胞毒药物和其他损伤所引起的应急反应，对机体起一定的保护作用。

**Product  
Picture**



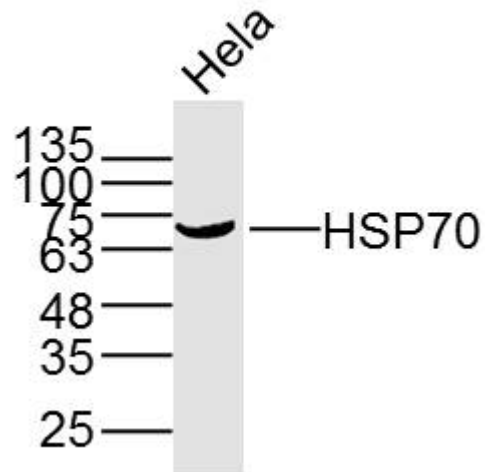
Sample: HepG2 Cell (Human) Lysate at 40 ug

Primary: Anti-HSP70 (SLM-33048M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 70 kD

Observed band size: 70 kD



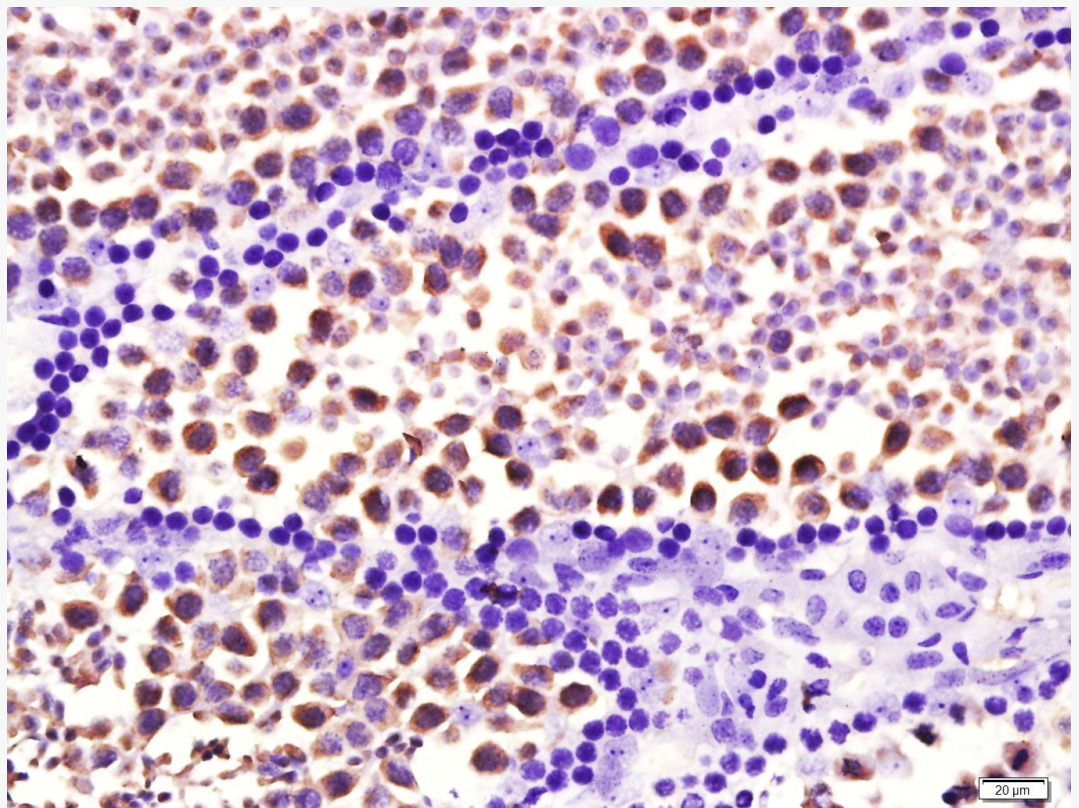
Sample: HeLa Cell (Human) Lysate at 40 ug

Primary: Anti-HSP70 (SLM-33048M) at 1/1000 dilution

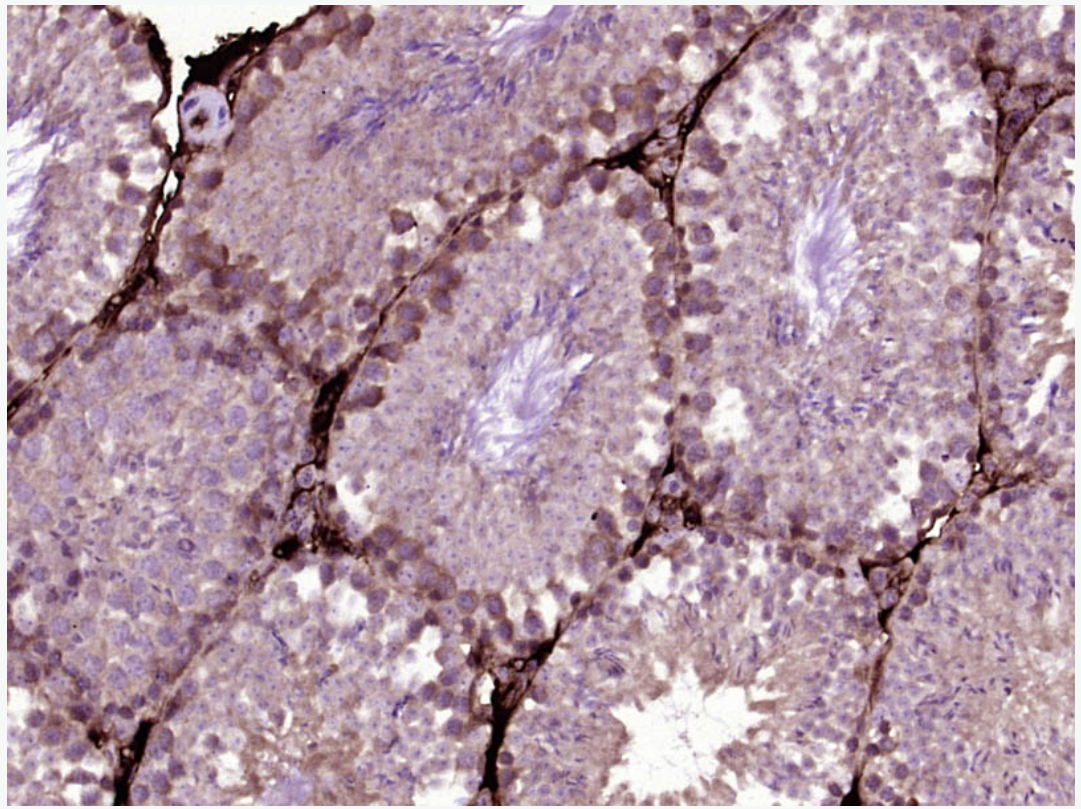
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 70 kD

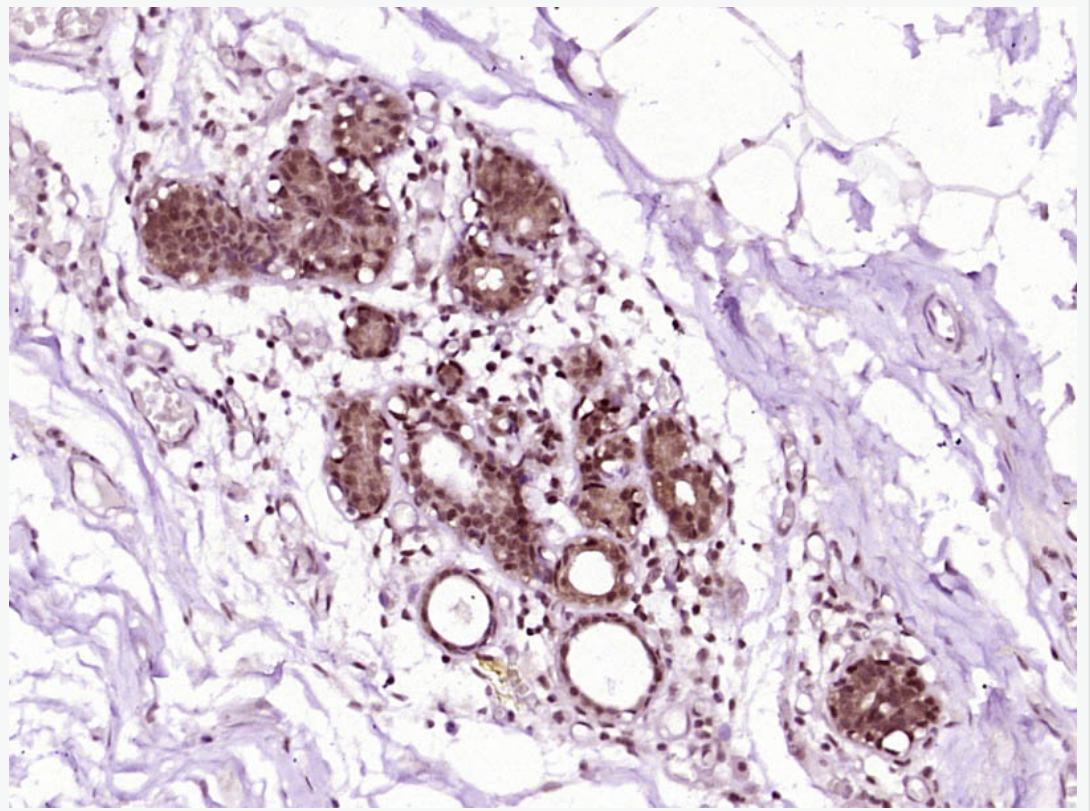
Observed band size: 70 kD



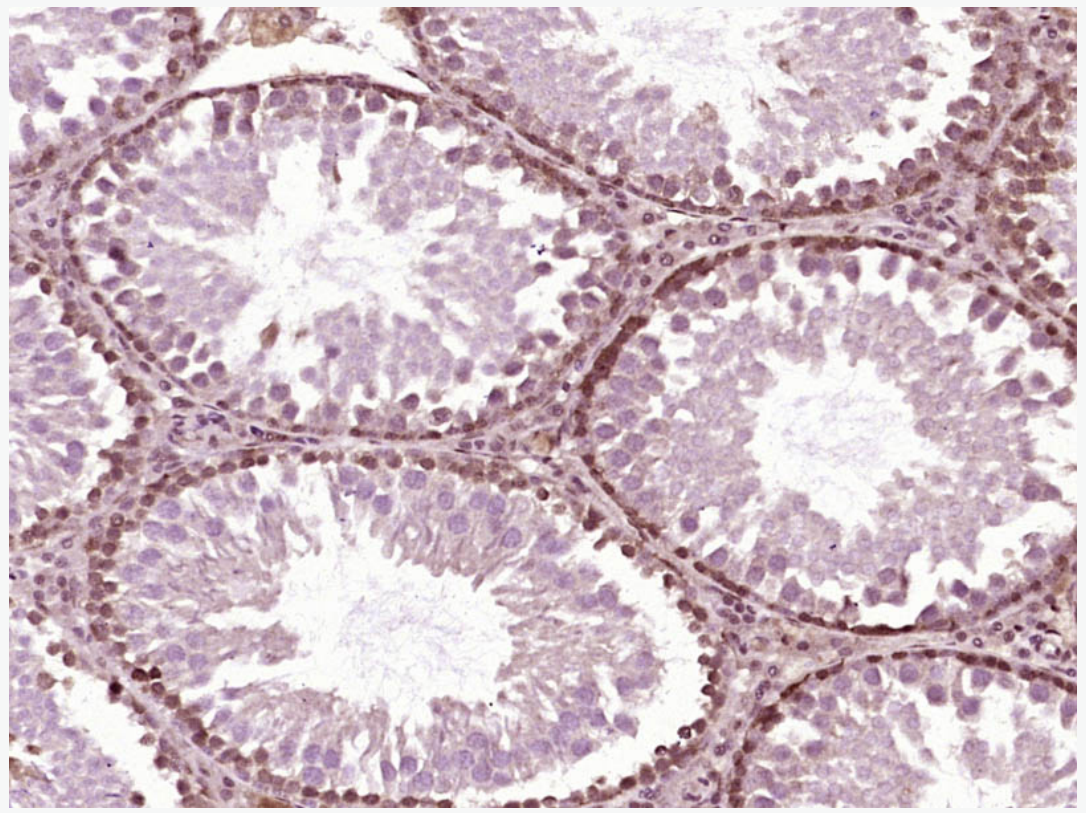
Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP70) Monoclonal Antibody, Unconjugated (SLM-33048M) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP70) Monoclonal Antibody, Unconjugated (ascites of SLM-33048M 5G10) at 1:2000 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP70) Monoclonal Antibody, Unconjugated (ascites of SLM-33048M 5G10) at 1:2000 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HSP70) Monoclonal Antibody, Unconjugated (ascites of SLM-33048M 5G10) at 1:2000 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.