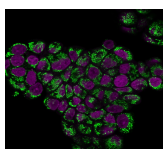


# HSP60 Monoclonal Mouse Antibody (LK1)



## Product Description

Recognizes a 60 kDa protein, identified as the heat shock protein 60 (hsp60). Its epitope is localized between aa 383-447 of human hsp60. A wide variety of environmental and pathophysiological stressful conditions trigger the synthesis of a family of proteins known as heat shock proteins (HSPs), more appropriately called as stress response proteins (SRPs). hsp60 is a potential antigen in a number of autoimmune diseases. In human arthritis and in experimentally induced arthritis in animals, disease development coincides with the development of immune reactivity directed against not only bacterial hsp60, but also against its mammalian homolog. Clone LK1, unlike LK2, recognizes only the mammalian (not bacterial) hsp60 and is useful in distinguishing hsp60 from mammals and bacteria.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0851, Anti-HSP60 (LK1)**

## Product attributes

<b>Antibody number</b>	#0851
<b>Antibody reactivity (target)</b>	HSP60
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	LK1
<b>Isotype</b>	IgG1, kappa
<b>Molecular weight</b>	60 kDa
<b>Synonyms</b>	60kDa chaperonin; 60kDa heat shock protein mitochondrial; Chaperonin; 60-KD (CPN60); GROEL; HLD4; HSP65; HSPD1; HuCHA60; Mitochondrial matrix protein P1; P60 lymphocyte protein; Short heat shock protein 60 Hsp60s1; Spastic paraplegia 13 (SPG13)
<b>Human gene symbol</b>	HSPD1
<b>Entrez gene ID</b>	3329
<b>SwissProt</b>	P10809
<b>Unigene</b>	595053
<b>Immunogen</b>	Recombinant human HSP60 protein
<b>Antibody target cellular localization</b>	Mitochondria
<b>Verified antibody applications</b>	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified), WB (verified)
<b>Species reactivity</b>	Chicken, Cow, Dog, Drosophila, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep, Xenopus laevis
<b>Expected antibody applications</b>	IP (published for clone)
<b>Antibody application notes</b>	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Does not react with bacteria, helminths, or spinach; others not known, Western blotting 0.25-0.5 ug/mL. Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	HeLa or HepG2 cells. Synovial biopsies from patients with juvenile chronic arthritis. Synovial lining layer is strongly positive for hsp60. Breast carcinoma.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
<b>Antibody research areas</b>	Autoimmunity, Heat shock proteins, Immunology, Inflammation
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF@405S Features</a>
BNC88	CF@488A	490/515	488	GFP, FITC	<a href="#">CF@488A Features</a>
BNC68	CF@568	562/583	532, 561	RFP, TRITC	<a href="#">CF@568 Features</a>
BNC94	CF@594	593/614	561	Texas Red®	<a href="#">CF@594 Features</a>
BNC40	CF@640R	642/662	633-640	Cy@5	<a href="#">CF@640R Features</a>
BNC47	CF@647	650/665	633-640	Cy@5	<a href="#">CF@647 Features</a>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

Cancer Lett (2017) 385: 75-86. (immunoprecipitation)

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Product link: <https://biotium.com/product/monoclonal-anti-hsp60-1k1/>

