

## HSP60 Monoclonal Mouse Antibody (CPTC-HSPD1-1)



## **Product Description**

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multiprotein complexes, transportation of nascent polypeptide chains across cellular membranes, and the regulation of protein folding. The mitochondrial and cytosolic localization of HSP60, combined with its binding and catalysis of folding of newly synthesized proteins destined for the mitochondrial matrix, classify this protein as a molecular chaperone. An additional role of HSP 60 is to act as a cell surface marker for T cell recognition, as well as being involved in a danger signal cascade immune response. HSP60 has been shown to influence apoptosis in tumor cells, and changes in its expression level may serve as a biomarker, as down-regulated HSP60 expression indicates a poor prognosis as well as a risk of tumor infiltration development, especially with regard to urothelial carcinomas. In ovarian cancer, decreased expression of HSP60 correlates with aggressive tumor types, while overexpression is correlated with a better patient prognosis.

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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2245, Anti-HSP60 (CPTC-HSPD1-1)

## Call us : 800-304-5357 Email: techsupport@biotium.com Ρ

Product attributes				
Antibody number	#2245			
Antibody reactivity (target)	HSP60			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	CPTC-HSPD1-1			
Isotype	IgG1, kappa			
Molecular weight	60 kDa			
Synonyms	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)			
Human gene symbol	HSPD1			
Entrez gene ID	3329			
SwissProt	P10809			
Unigene	595053			
Immunogen	Recombinant full-length human HSPD1 protein			
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified), WB (verified)			
Antibody target cellular localization	Mitochondria			
Species reactivity	Human			
Positive control	HEP-2, PC3 or HeLa cells. Breast or Colon Carcinoma.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^\circ$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ$ C			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	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			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Product origin	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	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
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	

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