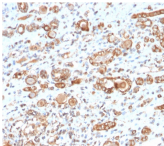


# HSP60 Monoclonal Mouse Antibody (CPTC-HSPD1-1)



## 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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

## 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 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °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

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
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

Dye Features
<a href="#">CF®405S Features</a>
<a href="#">CF®488A Features</a>
<a href="#">CF®568 Features</a>
<a href="#">CF®594 Features</a>
<a href="#">CF®640R Features</a>
<a href="#">CF®647 Features</a>

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