

Mouse anti-Human HSP60 (Heat Shock Protein 60) Monoclonal Antibody | anti-HSP60 antibody

HSP60 (Heat Shock Protein 60) (Mitochondrial Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA23919	Mouse	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

HSP60 (Heat Shock Protein 60); Monoclonal Antibody; HSP60 (Heat Shock Protein 60) (Mitochondrial Marker); 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); anti-HSP60 antibody

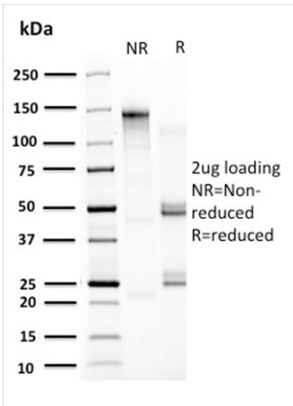
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	CPTC-HSPD1-1
Specificity	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.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	573
Applicable Applications for anti-HSP60 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	FC/FACS: 1-2ug/0.5 million cells in 0.1ml IF: 1-2ug/ml WB: 1-2ug/ml Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT) (Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)
Positive Control	HEP-2, PC3 or HeLa cells. Breast or Colon Carcinoma.
Immunogen	Recombinant full-length human HSPD1 protein
Cellular Localization	Mitochondria in cytoplasm
Hu-chromosome Location	2q33.1

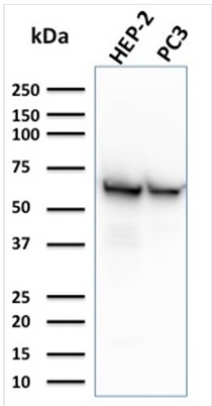
Preparation and Storage

Antibody with azide: store at 2 to 8 degree C.
Antibody without azide: store at -20 to -80 degree C.
Antibody is stable for 24 months. Non-hazardous. No MSDS required.

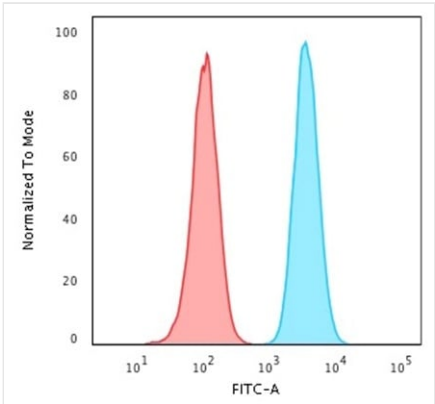
IMAGES



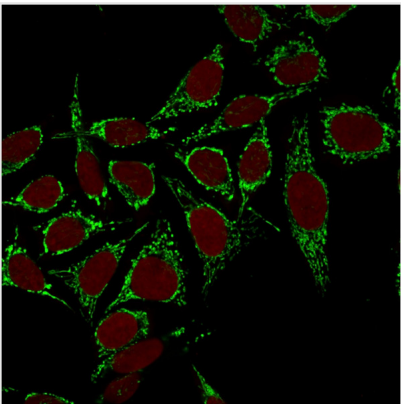
SDS-PAGE
SDS-PAGE Analysis Purified HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).
Confirmation of Purity and Integrity of Antibody.



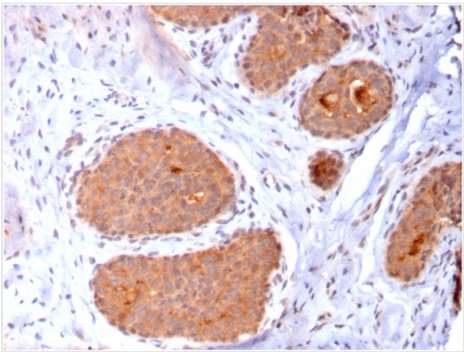
WB (Western Blot)
Western Blot Analysis of HEP-2 and PC3 cell lysates using HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).



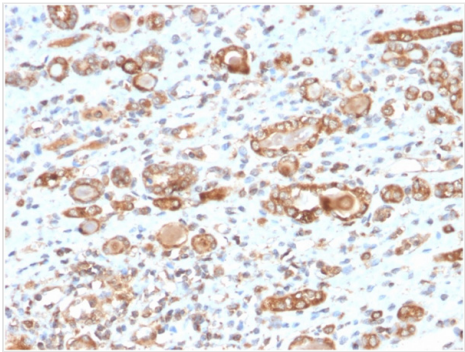
FCM (Flow Cytometry)
Flow Cytometric Analysis of PFA-fixed HeLa cells labeling HSP60 with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1) followed by Goat anti-Mouse IgG-CF488 (Blue) Isotype Control (Red)



IF (Immunofluorescence)
Immunofluorescence Analysis of human MCF-7 cells labeling GPI with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).

ADDITIONAL INFORMATION

References

Cheng, Ming Y., et al. 29 Nov. 1990.

NCBI AND UNIPROT INFORMATION

NCBI GI #	31542947
NCBI GeneID	3329
NCBI Accession #	NP_002147.2
NCBI GenBank Nucleotide #	NP_002147.2
UniProt Accession #	P10809
Molecular Weight	60kDa
NCBI Official Full Name	60 kDa heat shock protein, mitochondrial
NCBI Official Synonym Full Names	heat shock protein family D (Hsp60) member 1
NCBI Official Symbol	HSPD1
NCBI Official Synonym Symbols	HLD4; CPN60; GROEL; HSP60; HSP65; SPG13; HSP-60; HuCHA60
NCBI Protein Information	60 kDa heat shock protein, mitochondrial
UniProt Protein Name	60 kDa heat shock protein, mitochondrial
UniProt Gene Name	HSPD1
UniProt Synonym Gene Names	HSP60; CPN60; HSP-60; Hsp60
UniProt Entry Name	CH60_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/hsp60-heat-shock-protein-60-antibody-clone-cptc-hspd1-1-flow-cytometry-immunofluorescence-western-blot-immunohistochemistry-elisa/23919>