

36-2509: Anti-HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Monoclonal Antibody(Clone: CPTC-HSPD1-1)

Clonality :	Monoclonal
Clone Name :	CPTC-HSPD1-1
Application :	FACS,IF,WB,IHC
Reactivity :	Human
Gene :	HSPD1
Gene ID :	3329
Uniprot ID :	P10809
Alternative Name :	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)
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant full-length human HSPD1 protein

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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/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.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); ,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),

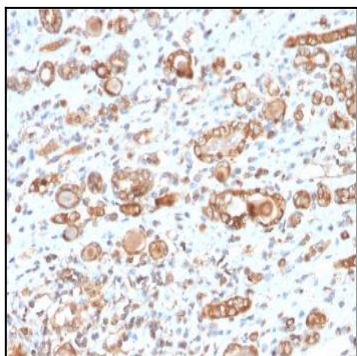


Fig. 1: Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).

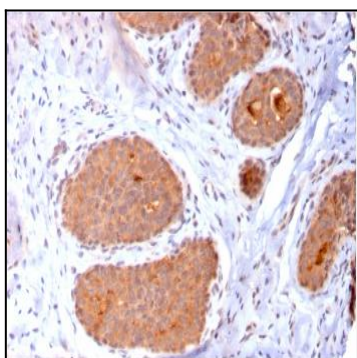


Fig. 2: Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).

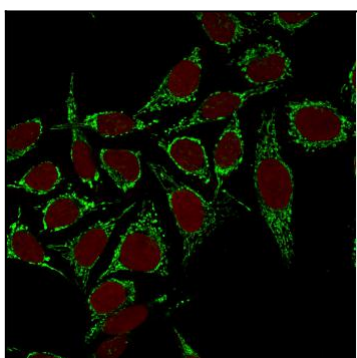


Fig. 3: Immunofluorescence Analysis of human MCF-7 cells labeling GPI with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)

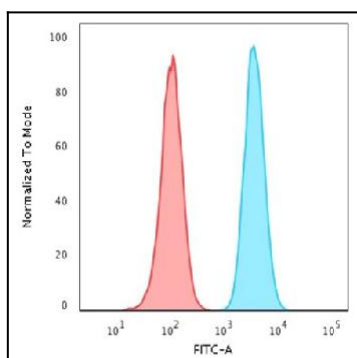


Fig. 4: Flow Cytometric Analysis of PFA-fixed HeLa cells labeling HSP60 with HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1) followed by Goat anti-Mouse IgG-CF488 (Blue) Isotype Control (Red)

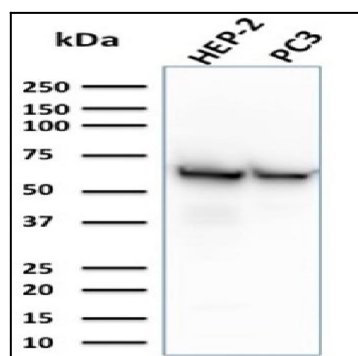


Fig. 5: Western Blot Analysis of HEP-2 and PC3 cell lysates using HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1).

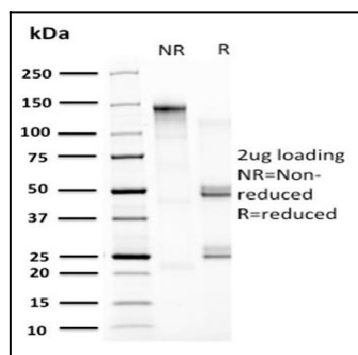


Fig. 6: SDS-PAGE Analysis Purified HSP60 Mouse Monoclonal Antibody (CPTC-HSPD1-1). Confirmation of Purity and Integrity of Antibody.