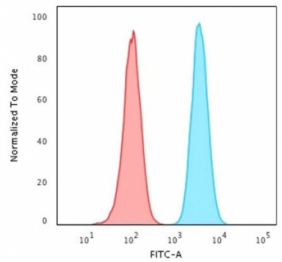
HSP60 Antibody [clone CPTC-HSPD1-1] (V7849)

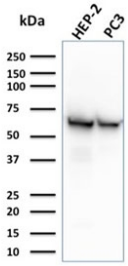
Catalog No.	Formulation	Size
V7849-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7849-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7849SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

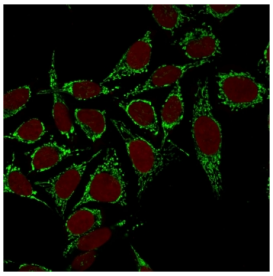
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-HSPD1-1
Purity	Protein G affinity chromatography
UniProt	P10809
Applications	Flow Cytometry : 1-2ug/10^6 cells in 0.1ml Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This HSP60 antibody is available for research use only.



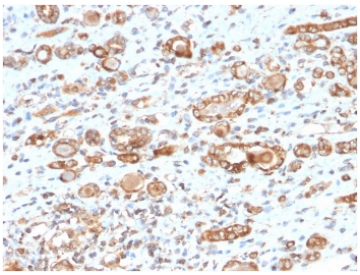
Flow testing of PFA-fixed human HeLa cells with HSP60 antibody (clone CPTC-HSPD1-1); Red=isotype control, Blue= HSP60 antibody.



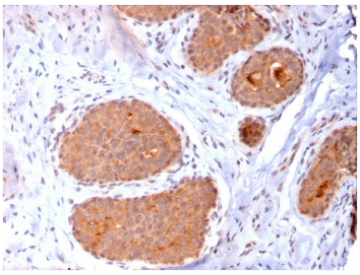
Western blot testing of human HEP-2 and PC3 cell lysate with HSP60 antibody (clone CPTC-HSPD1-1). Predicted molecular weight ~60 kDa.



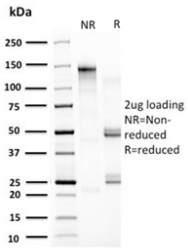
Immunofluorescent staining of fixed human MCF7 cells with HSP60 antibody (green, clone CPTC-HSPD1-1) and Reddot nuclear stain (red).



IHC staining of FFPE human renal cell carcinoma with HSP60 antibody (clone CPTC-HSPD1-1). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



IHC staining of FFPE human breast carcinoma with HSP60 antibody (clone CPTC-HSPD1-1). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free HSP60 antibody (clone CPTC-HSPD1-1) as confirmation of integrity and purity.

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.

Application Notes

Optimal dilution of the HSP60 antibody should be determined by the researcher.

Immunogen

Full length recombinant human protein was used as the immunogen for the HSP60 antibody.

Storage

Store the HSP60 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).