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530-758-4400

PRODUCT DATASHEET

Anti-Hsp60 (N-terminal region) Antibody

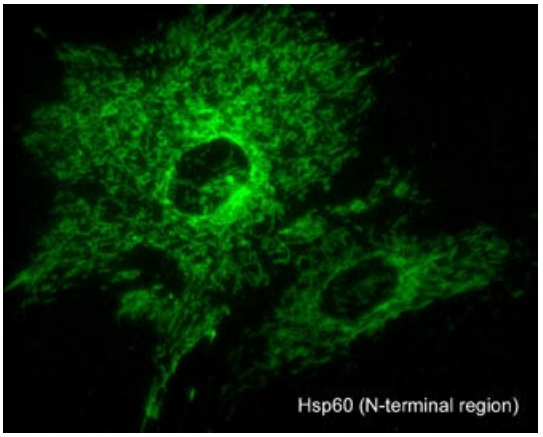
phosphosolutions ANTIBODIES THAT WORK

Product Details

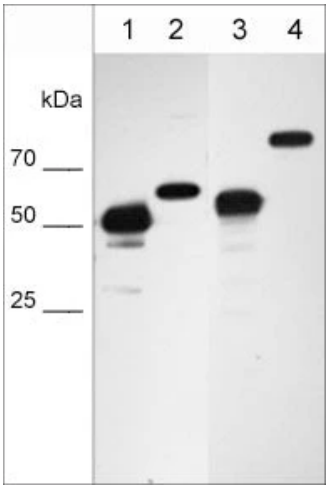
Available Variants	100 µL (SKU:HM4381)
Conjugate	Unconjugated
Isotype	IgG1
Clone	M438
Gene Name	HSPD1
Host Species	Mouse
Format	Protein A Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, ICC, WB
Dilution Ranges	WB: 1:1000 ICC: 1:100
Species Reactivity	Human, Mouse, Rat
Immunogen	Clone M438 was generated from a recombinant protein corresponding to amino acid residues in the N-terminal region of human Hsp60. This sequence has high homology to similar regions in rat and mouse Hsp60.
Specificity	This antibody detects a 60 kDa* protein corresponding to the apparent molecular mass of Hsp60 on SDS-PAGE immunoblots of human Jurkat and rat A7r5 cells. In immunocytochemistry, anti-Hsp60 specifically stains mitochondria in paraformaldehyde fixed and NP-40 permeabilized cells.
Molecular Weight	60
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at

	-20°C.
UniProt ID	P10809 UniProt Summary: Chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp10, facilitates the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix. The functional units of these chaperonins consist of heptameric rings of the large subunit Hsp60, which function as a back-to-back double ring. In a cyclic reaction, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by the binding of ATP and association with 2 heptameric rings of the co-chaperonin Hsp10. This leads to sequestration of the substrate protein in the inner cavity of Hsp60 where, for a certain period of time, it can fold undisturbed by other cell components. Synchronous hydrolysis of ATP in all Hsp60 subunits results in the dissociation of the chaperonin rings and the release of ADP and the folded substrate protein (Probable).
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	3329

Product Images



Immunocytochemical labeling of Hsp60 in mitochondria in paraformaldehyde-fixed and NP40-permeabilized A7r5 cells. The cells were labeled with mouse monoclonal Hsp60 (HM4381). The antibody was detected using goat anti-mouse DyLight® 488.



Western blot image of cell structure markers in NCI-H1915 lung carcinoma cells. The blot was probed with anti-Vimentin intermediate filament protein VM4341 (lane 1), anti-Nucleoporin p62 NM4361 (lane 2), anti-Hsp60 mitochondrial protein HM4381 (lane 3), and anti-Calnexin endoplasmic reticulum protein CM4371 (lane 4).