OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA389147

HSPD1 Mouse Antibody [Clone ID: M438]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M438
Applications:	ICC, WB
Recommended Dilution:	**WB**: 1:1000 **ICC**: 1:100
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
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.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
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.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	60
Database Link:	P10809

View online »

Background: Heat shock proteins (Hsp) are a family of highly conserved proteins that include both constitutively expressed (Hsp60, Hsp70, and Hsp90) and stress-induced (Hsp27 and Hsp72) proteins. Hsp60 is a mitochondrial protein that promotes protein folding and facilitates proteolytic degradation of misfolded or denatured proteins in the mitochondria. Hsp10 interacts with Hsp60 to regulate its substrate binding and ATPase activity. In HeLa and Jurkat mitochondria, Hsp60 associates with caspase-3 to form a complex that dissociates and releases from the mitochondria during apoptosis. Hsp60 accelerates the maturation of procaspase-3 through its ATP-dependent "foldase" activity. In addition to its protein folding activity, Hsp60 can bind the toll-like receptor-4 complex leading to production of TNFα and stimulation of a pro-inflammatory response in macrophages. Thus, the protein folding function of Hsp60 is involved in protein folding in both normal and apoptotic cells, while release of Hsp60 during necrosis is thought to stimulate a pro-inflammatory response.

Note: Protein G purified tissue culture supernatant.