



Cat nr AE00293

Product Datasheet

Mouse Monoclonal Antibody, clone HSPD1/780 to:

HSP60, GroEL

HSPD1, CPN60, GROEL, HLD4, HSP-60, HSP60, HSP65, HuCHA60, SPG13, 60 kDa heat shock protein, mitochondrial, 60 kDa chaperonin, Chaperonin 60, Heat shock protein 60, Heat shock protein family D (Hsp60) member 1, Mitochondrial matrix protein P1, P60 lymphocyte protein

Cellular localization Mitochondria

Official Symbol (Gene) HSPD1

GenelD 3329

SwissProt P10809

Confirmed Applications ICC, IHC, PA, WB
Positive controls HeLa, MCF7, carcinoma

Aeonian Rating© 80

Purification By Protein G from bioreactor concentrate
Formulation 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)
 1mg IgG/ml in PBS (100ug or contact us for quotation)

Amount 20ug 100ug

Isotype Mouse IgG1, kappa

Confirmed species reactivity Human

Immunogen Recombinant full length human HSP60 protein

Epitope Unknown

Storage instructions Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

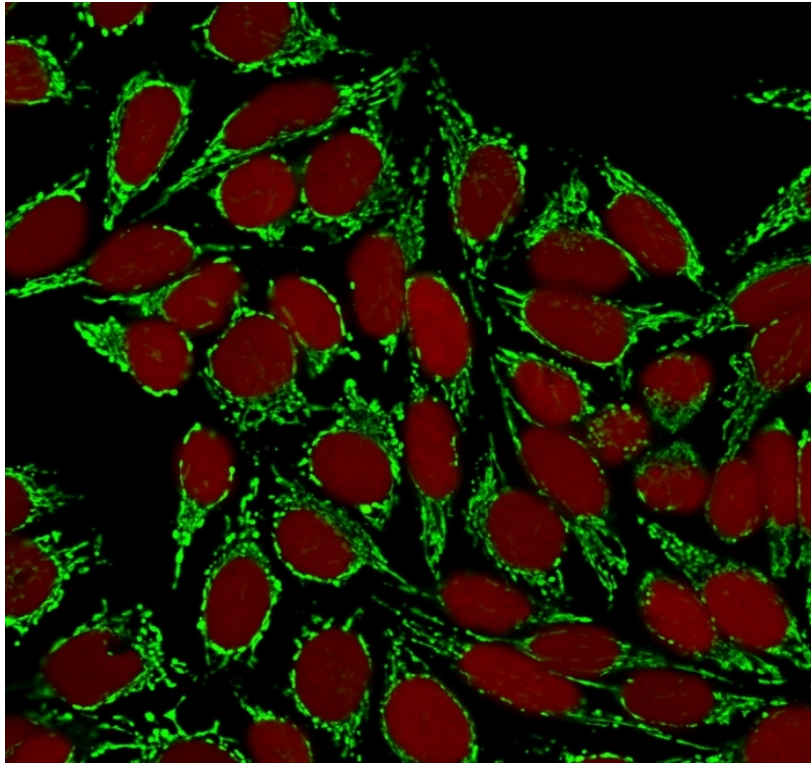
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

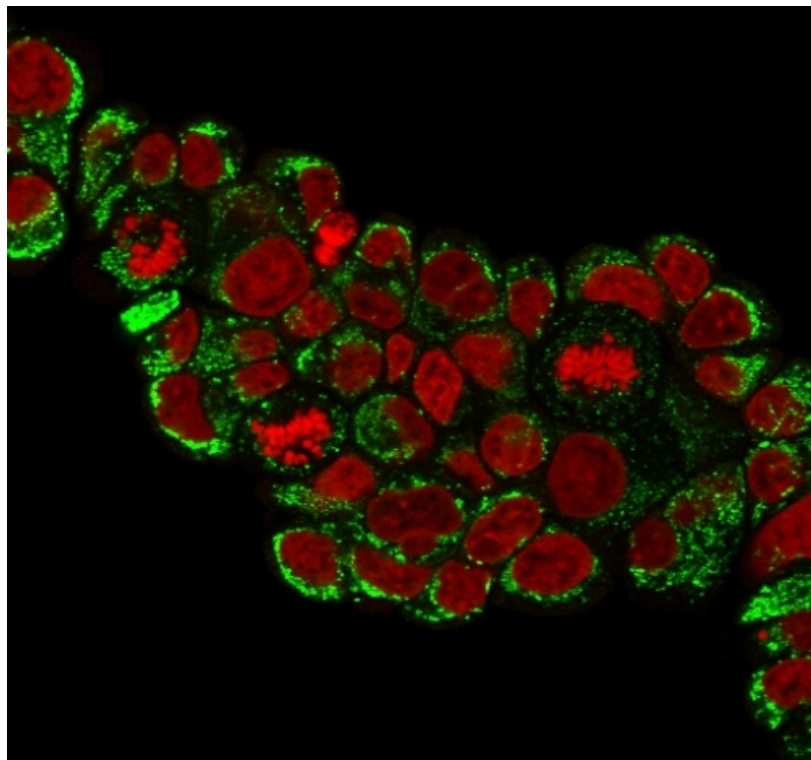
Product data:

ImmunoCytoChemistry (ICC):

This product shows staining of mitochondria in cell lines HeLa and MCF7. Recommended concentration: 1-3ug/ml



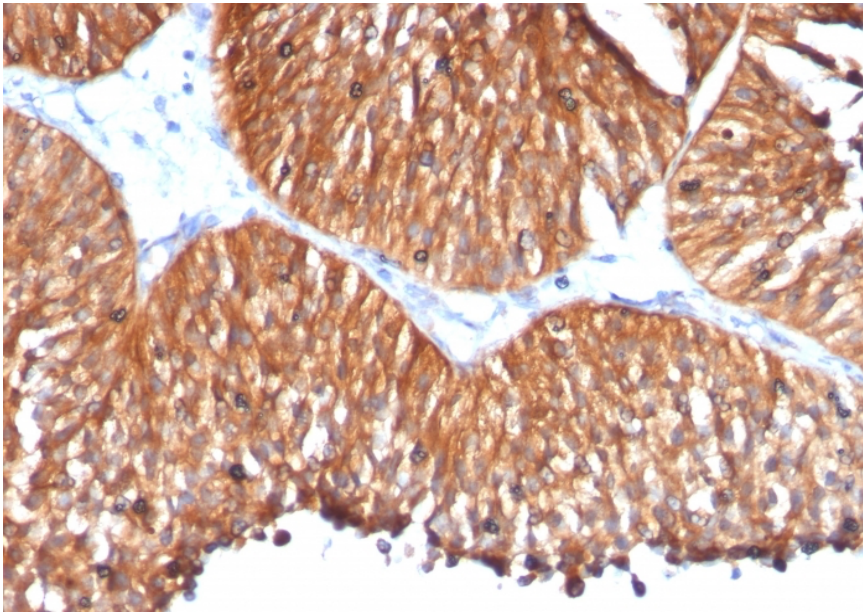
Confocal microscopy of HeLa stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml (1h at ambient temp). Detection by CF488 (green) for the antibody and RedDot (red) for nuclear staining.



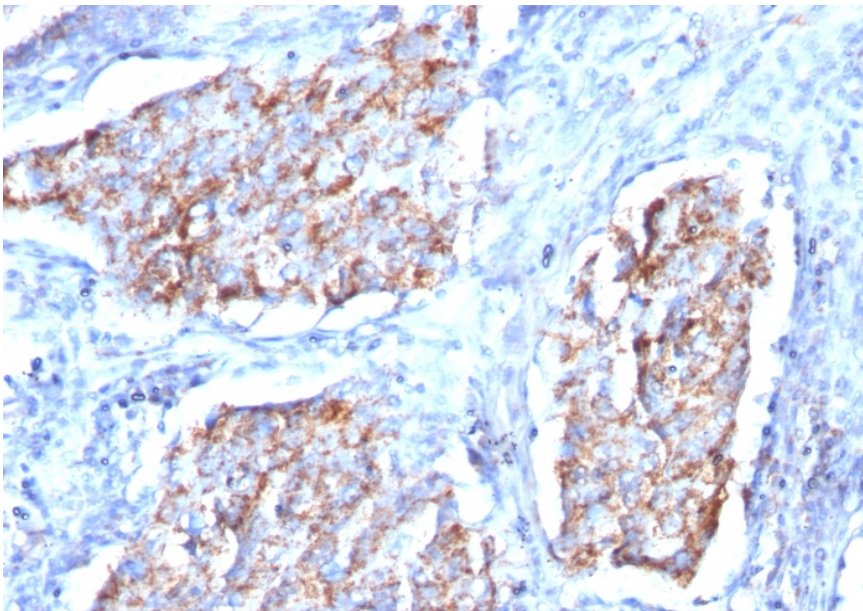
Confocal microscopy of MCF7 stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml (1h at ambient temp). Detection by CF488 (green) for the antibody and RedDot (red) for nuclear staining.

ImmunoHistoChemistry (IHC):

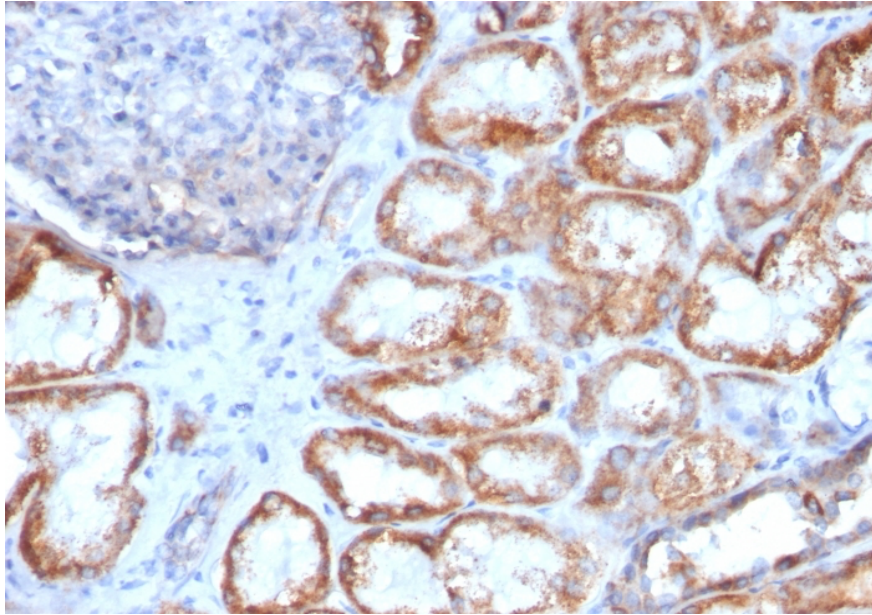
This product shows staining mitochondria in human carcinoma sections of the bladder, lung and kidney.
Recommended concentration: 1-3ug/ml



Formaldehyde-fixed, paraffin-embedded human bladder carcinoma stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Heating at 95°C for 45 min at pH9 followed by 20 min cooling. DAB staining by HRP polymer.



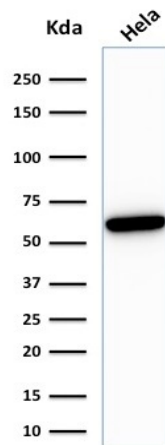
Formaldehyde-fixed, paraffin-embedded human lung carcinoma stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Heating at 95°C for 45 min at pH9 followed by 20 min cooling. DAB staining by HRP polymer.



Formaldehyde-fixed, paraffin-embedded human renal carcinoma stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Heating at 95°C for 45 min at pH9 followed by 20 min cooling. DAB staining by HRP polymer.

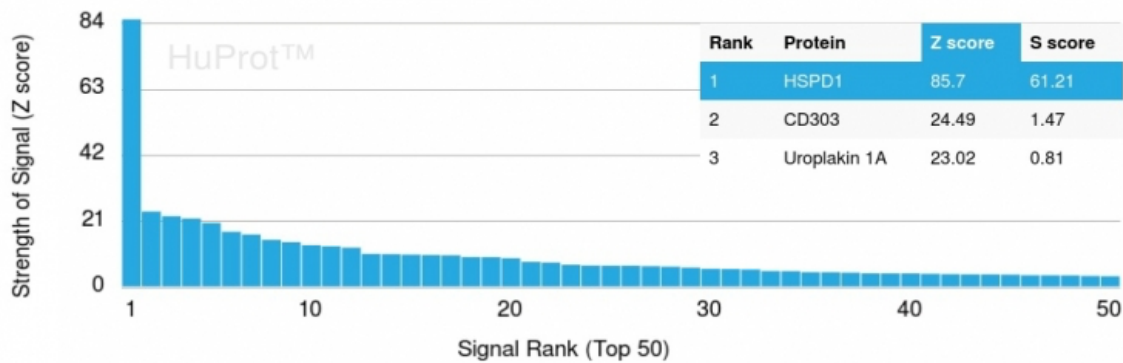
Western Blot (WB):

This product was successfully used to stain an approx. 60kDa band in lysates of cell line HeLa.
Recommended concentration: 1-3ug/ml



Western Blot of a HeLa lysate (30ug) stained with HSP60 Mouse Monoclonal Antibody AE00293 at 1-2ug/ml (1h at ambient temp). ECL staining by HRP.

Specificity and selectivity of AE00293 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed no closely related other proteins.



Cross-reactivity assessment of HRP60 Mouse Monoclonal Antibody AE00293 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).