HSP70/HSP72 monoclonal antibody (N15F2-5)

The 70 kDa heat shock protein Hsp70 belongs to the Hsp70 family of highly-related protein isoforms ranging in size from 66 kDa to 78 kDa. Hsc70 shares close biochemical and biological ties to Hsp70, and also belongs to the Hsp70 family. These proteins include cognate members found within major intracellular compartments and highly inducible isoforms predominantly cytoplasmic or nuclear in distribution. Members of the Hsp70 family function as molecular chaperones involved in such cellular functions as protein folding, transport, maturation and degradation, operating in an ATP-dependent manner. The molecular chaperones of the Hsp70 family recognize and bind to nascent polypeptide chains or partially folded intermediates of proteins, preventing their aggregation and misfolding, and the binding of ATP triggers a critical conformational change leading to the release of the bound substrate protein. Data demonstrates that with a ubiquitin-like domain at its amino terminus and its association with the 26S proteosome in HeLa cells, Bag-1 modulates the chaperone activity of Hsc70 and Hsp70. These findings reveal Bag-1's role as a physical link between the Hsc70/Hsp70 chaperone system and the proteasome. Experimental data also shows that the ATPase domain and the substrate-binding domain of Hsp70 (or Hsc70) cooperate to form a co-chaperone-chaperone complex with the synaptic vesicle cysteine string protein (csp), essential for normal neurotransmitter release.

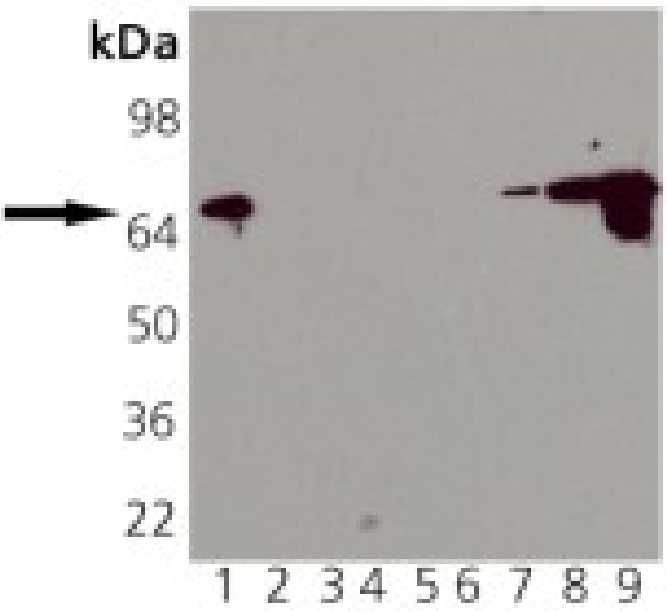
This antibody is covered by our Worry-Free Guarantee.

Citations: 4 View Online »

Ordering Information Order Online »

ADI-SPA-8133-D	50µg

Manuals, SDS & CofA View Online »



Western blot analysis of HSP70 mAb: Lane 1: HSP70 Recombinant Human Protein, Lane 2: HSP70B' Recombinant Human Protein, Lane3: HSP70-A1 Recombinant Mouse Protein, Lane 4: HSP70 Recombinant Chinook Salmon Protein, Lane 5: HSC70 Recombinant Bovine Protein, Lane 6: HSC70 (ATPase Fragment) Recombinant Bovine Protein, Lane 7: DnaK Recombinant E. coli Protein, Lane 8: HeLa Cell Lysate, Lane 9: HeLa Cell Lysate, Heat Shocked.

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Hsp70, HspA1A, Heat shock protein 70, HspA1B, Hsp72
Application	WB
Application Notes	Detects a band of ~70kDa by Western blot.
Clone	N15F2-5
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
GenBank ID	M11717
Gene/Protein Identifier	NP_005336.3 (RefSeq), NM_005345 (RefSeq), 3303 (Entrez GeneID), 140550 (OMIM)
Host	Mouse
Immunogen	Native human Hsp70.
Isotype	IgG1
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:1,000, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from hybridoma tissue culture supernatant.
Species Reactivity	E. coli, Human

UniProt ID	P0DMV8 (HSPA1A), P0DMV9 (HSPA1B)

Worry-free Guarantee

This antibody is covered by our Worry-Free Guarantee .

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.