# antibodies - online.com







## anti-HSP70 antibody (FITC)



### **Images**



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	IV/E	۱/۱۲	$I \cap V$

Quantity:	200 μg
Target:	HSP70
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This HSP70 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC), Flow Cytometry (FACS), Antibody Array (AA), Immunoelectron Microscopy (IEM), BioImaging (BI)

#### **Product Details**

Immunogen:	Human HSP70
Clone:	C92F3A-5
Isotype:	lgG1
Specificity:	Detects ~70 kDa. Does not cross-react with HSC70 (HSP73).
Cross-Reactivity:	C. elegans, Carp, Chicken, Cow, Dog, Drosophila melanogaster, Guinea Pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep
Purification:	Protein G Purified

#### **Target Details**

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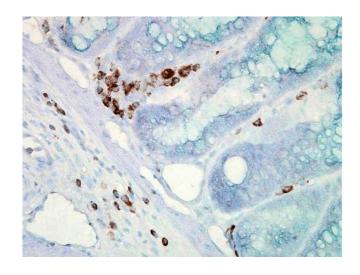
Alternative Name:	HSP70 (HSP70 Products)	
Background:	HSP70 genes encode abundant heat-inducible 70- kDa HSPs (HSP70s). In most eukaryotes	
	HSP70 genes exist as part of a multigene family. They are found in most cellular compartments	
	of eukaryotes including nuclei, mitochondria, chloroplasts, the endoplasmic reticulum and the	
	cytosol, as well as in bacteria. The genes show a high degree of conservation, having at least	
	50 % identity (2). The N-terminal two thirds of HSP70s are more conserved than the C-terminal	
	third. HSP70 binds ATP with high affinity and possesses a weak ATPase activity which can be	
	stimulated by binding to unfolded proteins and synthetic peptides (3). When HSC70	
	(constitutively expressed) present in mammalian cells was truncated, ATP binding activity was	
	found to reside in an N-terminal fragment of 44 kDa which lacked peptide binding capacity.	
	Polypeptide binding ability therefore resided within the C-terminal half (4). The structure of this	
	ATP binding domain displays multiple features of nucleotide binding proteins (5). All HSP70s,	
	regardless of location, bind proteins, particularly unfolded ones. The molecular chaperones of	
	the HSP70 family recognize and bind to nascent polypeptide chains as well as partially folded	
	intermediates of proteins preventing their aggregation and misfolding. The binding of ATP	
	triggers a critical conformational change leading to the release of the bound substrate protein	
	(6). The universal ability of HSP70s to undergo cycles of binding to and release from	
	hydrophobic stretches of partially unfolded proteins determines their role in a great variety of	
	vital intracellular functions such as protein synthesis, protein folding and oligomerization and	
	protein transport. For more information visit our HSP70 Scientific Resource Guide at	
	http://www.HSP70.com.	
Gene ID:	3303	
NCBI Accession:	NP_005336	
UniProt:	PODMV8, PODMV9	
Application Details		
Application Notes:	• WB (1:1000)	
	• IHC (1:10000)	
	• ICC/IF (1:1000)	
	<ul> <li>FACS (1:1000)</li> <li>optimal dilutions for assays should be determined by the user.</li> </ul>	
Comment:	1 $\mu$ g/ml of ABIN2485869 was sufficient for detection of HSP70 in 20 $\mu$ g of heat shocked HeLa	
	cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the	
	secondary antibody.	

#### **Application Details**

#### Handling

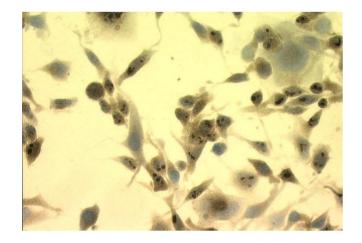
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.1 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

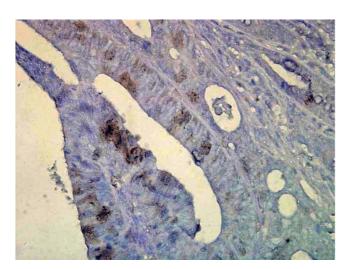
#### **Images**



#### **Immunohistochemistry**

Image 1. Immunohistochemistry analysis using Mouse Anti-Hsp70 Monoclonal Antibody, Clone C92. Tissue: colon carcinoma. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp70 Monoclonal Antibody at 1:10000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT. Localization: Inflammatory cells. Magnification: 40x.





#### Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp70 Monoclonal Antibody, Clone C92. Tissue: Heat Shocked Melanoma cells. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp70 Monoclonal Antibody at 1:1000 for 16 hours at RT. Secondary Antibody: Biotin Goat Anti-Mouse. Courtesy of: Dr. Ewa Malusecka, Maria Sklodowska-Curie Memorial Cancer Centre and Inst. Of Oncology, Poland.

#### **Immunohistochemistry**

Image 3. Immunohistochemistry analysis using Mouse Anti-Hsp70 Monoclonal Antibody, Clone C92. Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp70 Monoclonal Antibody at 1:10000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT. Localization: Inflammatory cells. Magnification: 40x.

Please check the product details page for more images. Overall 5 images are available for ABIN2485869.