Product Data Sheet:
HSP70 Mouse Monoclonal Antibody

Cat. No:	MAB-94941
Conjugate:	Unconjugated
Size:	100 ug
Clone:	33A
Concentration:	1mg/ml
Host:	Mouse
Isotype:	IgG1
Immunogen:	Synthetic Peptide
Reactivity:	Human,Mouse,Rat
Applications:	WesternBlot:1/1000-2000 Immunofluorescence:1/100-200 Immunohistochemistry:1/200-500
Molecular Weight:	70kDa
Purification:	Affinity purification
Synonyms:	Heat shock 70 kDa protein/2 heat shock 70kDa proteinA HSP70 HSP70 HSP70/HSP70 2 HSP70A HSP70.1/HSP70.2 HSP70I HSP72 HSPA1 HSPA1A HSPA1B
Background:	The 70 kilodalton heat shock proteins (Hsp70s) are a family of ubiquitously expressed heat shock proteins. Proteins with similar structure exist in virtually all living organisms. The Hsp70s are an important part of the cell's machinery for protein folding and help to protect cells from stress. Hsp70 is usually in an ATP bound state. Hsp70 by itself is characterized by a very weak ATPase activity such that spontaneous hydrolysis will not occur for many minutes. As newly synthesized proteins emerge from the ribosomes the substrate binding domain of Hsp70 recognizes sequences of hydrophobic amino acid residues and interacts with them. This spontaneous interaction is reversible and in the ATP bound state Hsp70 may relatively freely bind and release peptides. However the presence of a peptide in the binding domain stimulates the ATPase activity of Hsp70 increasing its normally slow rate of ATP hydrolysis.
Form:	Liquid
Buffer:	PBS with 0.02% sodium azide and 50% glycerol pH 7.4.
Storage:	Store at -20°C. Avoid repeated freeze-thaw cycles.

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