HSP70 Mouse mAb

Cat No: HR1AM2153

For research use only

Overview

Product Name	HSP70 Mouse mAb
Source	Mouse
Applications	WB, IHC, IF
Species Reactivity	Human,Rat,Mouse
Recommended Dilutions	WB 1:1,000-2,000 IF 1:100-200 IHC 1:200-500
Immunogen	
Species	Mouse
Storage	PBS with 0.02% sodium azide and 50% glycerol pH 7.4. Store at -20°C. Avoid repeated freeze-thaw cycles.
Isotype	IgG1
Clonality	Monoclonal
Concentration	1mg/ml
Observed band	70kDakDa
GeneID?Human?	3303
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	Heat shock 70 kDa protein 1/2, heat shock 70kDa protein 1A, HSP70, HSP70 1, HSP70 1/HSP70 2, HSP70 1A, 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.