

## 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 PeptideReactivity: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

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

**Background:**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.

For Research use only IMMUNOLOGICAL SCIENCES