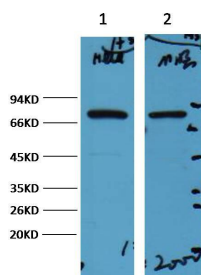


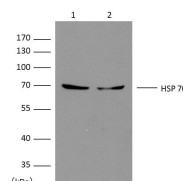
<b>Cat. No:</b>	MAB-94941
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	33A
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Immunogen:</b>	Synthetic Peptide
<b>Reactivity:</b>	Human,Mouse,Rat
<b>Applications:</b>	WesternBlot:1/1000-2000 Immunofluorescence:1/100-200 Immunohistochemistry:1/200-500
<b>Molecular Weight:</b>	70kDa
<b>Purification:</b>	Affinity purification
<b>Synonyms:</b>	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.

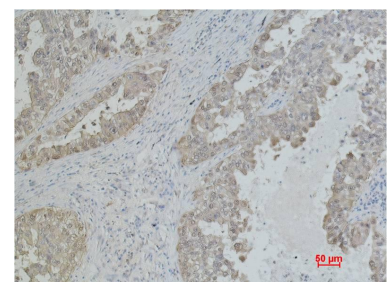
<b>Form:</b>	Liquid
<b>Buffer:</b>	PBS with 0.02% sodium azide and 50% glycerol pH 7.4.
<b>Storage:</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.



Western blot analysis of HeLa (Lane 1) and Mouse Brain with HSP70 mAb diluted at 1:2000.

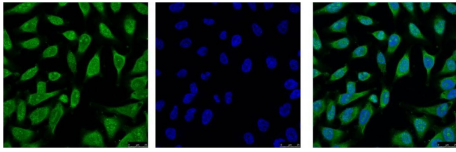


Western blot analysis of extracts from HeLa (Lane 1) and MCF-7 (Lane 2) using HSP70 mAb diluted at 1:2000.



Immunohistochemical analysis of paraffin-embedded Human Lung carcinoma using HSP70 Mouse mAb

diluted at:500.



IF analysis of Hela with (Left) and DAPI  
(Right) diluted at:100.