



# HSP70 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-04337
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	IF;WB;IHC;ELISA
<b>Gene Name</b>	HSPA1A
<b>Protein Name</b>	Heat shock 70 kDa protein 1A/1B
<b>Immunogen</b>	Synthesized peptide derived from human HSP70 around the non-acetylation site of K246.
<b>Specificity</b>	HSP70 Polyclonal Antibody detects endogenous levels of HSP70 protein
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IF: 1:50-200 Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	HSPA1A; HSPA1; HSPA1B; Heat shock 70 kDa protein 1A/1B; Heat shock 70 kDa protein 1/2; HSP70-1/HSP70-2; HSP70.1/HSP70.2
<b>Observed Band</b>	70kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Secreted . Localized in cytoplasmic mRNP granules containing untranslated mRNAs.
<b>Tissue Specificity</b>	Brain,Cajal-Retzius cell,Embryonic kidney,Epithelium,Fetal
<b>Function</b>	function:In cooperation with other chaperones, Hsp70s stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In case of rotavirus A infection, serves as a post-attachment receptor for the virus to facilitate entry into the cell.,induction:By heat shock.,similarity:Belongs to the heat shock protein 70 family.,subunit:HSPA1B is found in a sperm-specific complex with CATSPER1 and CATSPERB (By similarity). Interacts with TSC2. Interacts with IRAK1BP1.,tissue specificity:HSPA1B is testis-specific

**Background**

This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008],

**matters needing attention**

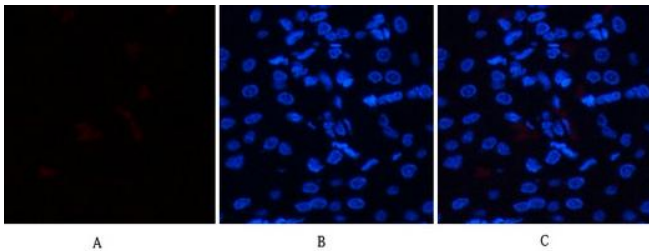
Avoid repeated freezing and thawing!

**Usage suggestions**

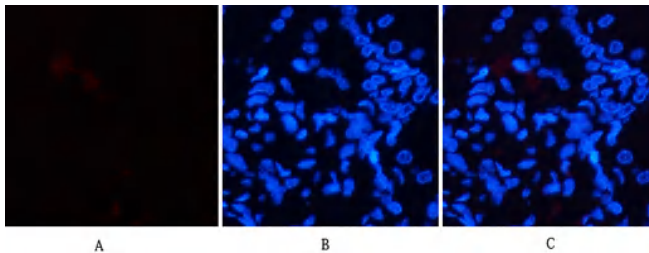
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



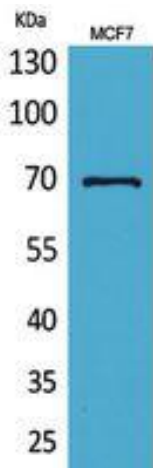
## Products Images



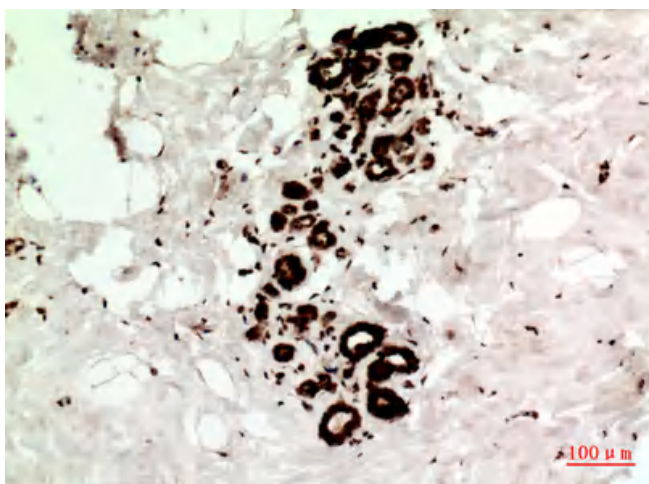
Immunofluorescence analysis of human-kidney tissue. 1,HSP70 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



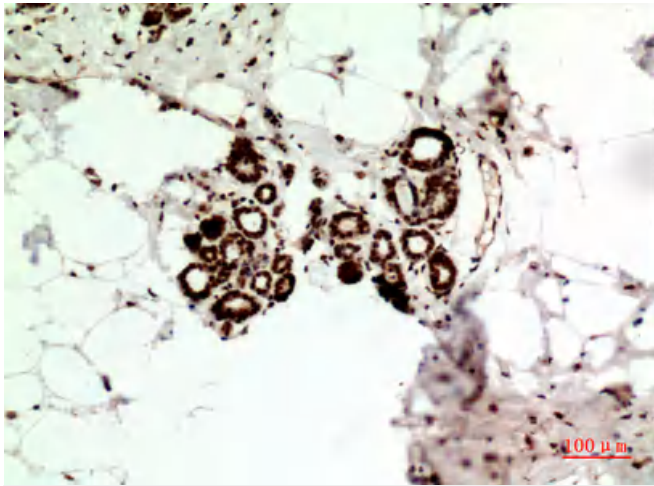
Immunofluorescence analysis of human-kidney tissue. 1,HSP70 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western Blot analysis of MCF7 cells using HSP70 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-Breast-cancer, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-Breast-cancer, antibody was diluted at 1:100