

For Research Use Only

# HSP70 Recombinant antibody

Catalog Number: 80735-1-RR



## Basic Information

<b>Catalog Number:</b> 80735-1-RR	<b>GenBank Accession Number:</b> BC009322	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 500 µg/ml	<b>GeneID (NCBI):</b> 3303	<b>CloneNo.:</b> 4E10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> PODMV8	<b>Recommended Dilutions:</b> WB 1:5000-1:20000 IHC 1:50-1:500 IF 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> heat shock 70kDa protein 1A	
<b>Immunogen Catalog Number:</b> AG1446	<b>Calculated MW:</b> 70 kDa	
	<b>Observed MW:</b> 70 kDa	

## Applications

**Tested Applications:**  
IF/ICC, IHC, WB, ELISA

**Species Specificity:**  
Human, mouse, rat, yeast

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HEK-293 cells, HeLa cells, K-562 cells, NIH/3T3 cells, C6 cells, the whole yeast

**IHC:** human breast cancer tissue, human liver cancer tissue

**IF:** HeLa cells,

## Background Information

HSPA1A, collectively known as HSP70 (also referred to HSP72), is a stress-inducible member of heat-shock protein 70 (HSP70) proteins which are highly conserved chaperons implicated in protein folding, protein refolding, protein transport, and protein targeting. Encoded by two closely linked, intronless and stress-inducible genes, HSPA1A and HSPA1B differ by only two amino acids and are believed to be fully interchangeable proteins. HSPA1A is a cytosol nuclear protein able to translocate between cytoplasm and nucleus. Generally, HSPA1A is thought to be expressed in unstressed normal cells at low or undetectable levels. Expression of HSPA1A protein can be highly activated by various stressful stimuli. Significant up-regulation of HSPA1A has been found in various tumors. Recently it has been reported that HSPA1A can be constitutively expressed in selected cell types. HSP70 is also used as exosomal marker

## Storage

**Storage:**  
Store at -20°C.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

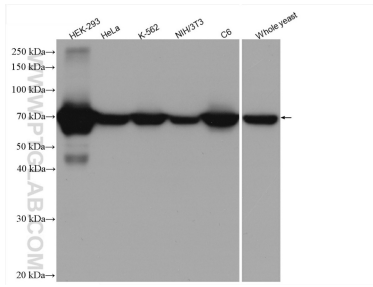
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

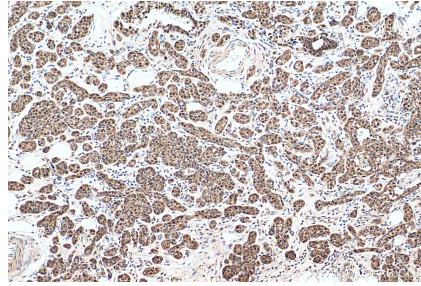
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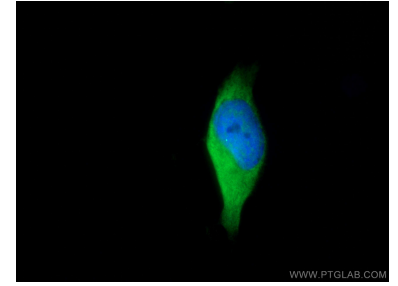
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 80735-1-RR (HSP70 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 80735-1-RR (HSP70 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using HSP70 antibody (80735-1-RR, Clone: 4E10) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).