For Research Use Only

HSP70 Recombinant antibody

Catalog Number:80735-1-RR 1 Publications

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Basic Information

Catalog Number:
80735-1-RR

Size:
100ul , Concentration: 500 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1446

GenBank Accession Number:
BC009322

GeneID (NCBI):
3303

UNIPROT ID:
P0DMV8

Full Name:
heat shock 70kDa protein 1A

Calculated MW:
70 kDa

Observed MW:
70 kDa

Purification Method:
Protein A purification

CloneNo.:
4E10

Recommended Dilutions:
WB: 1:5000-1:20000
IHC: 1:200-1:6000
IF/ICC: 1:200-1:800

Applications

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

Cited Applications:
WB

Species Specificity:
human, mouse, rat, yeast

Cited Species:
human

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 colon cancer tissue, human liver cancer tissue, human lung squamous cell carcinoma tissue

IF/ICC : 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

Notable Publications

Author	Pubmed ID	Journal	Application
Xian-Jia Li	40012358	J Med Chem	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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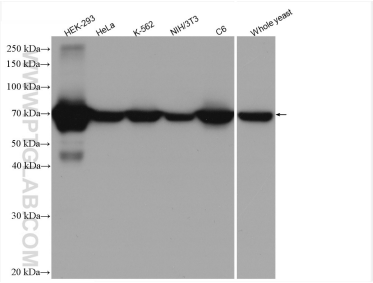
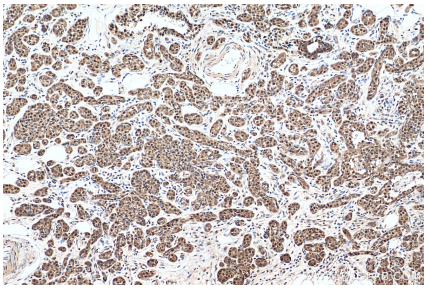
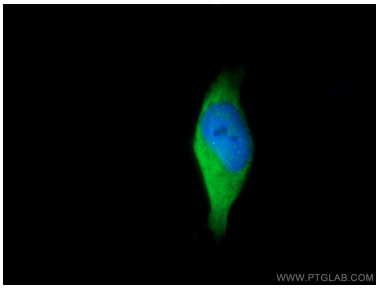
Selected Validation Data



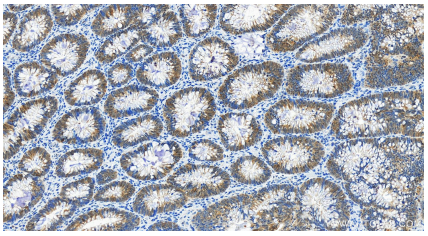
Various lysates were subjected to SDS PAGE followed by western blot with 80735-1-RR (HSP70 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



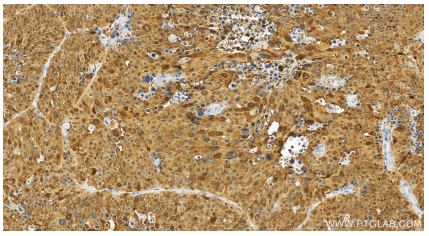
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 80735-1-RR (HSP70 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 80735-1-RR (HSP70 antibody) at dilution of 1:6000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma tissue slide using 80735-1-RR (HSP70 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).