

For Research Use Only

# Hsc70 Monoclonal antibody

Catalog Number: 66442-1-Ig

Featured Product

10 Publications



## Basic Information

Catalog Number:

66442-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 500 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG17910

GenBank Accession Number:

BC007276

GeneID (NCBI):

3312

UNIPROT ID:

P11142

Full Name:

heat shock 70kDa protein 8

Calculated MW:

70 kDa

Observed MW:

70 kDa

Purification Method:

Protein G purification

CloneNo.:

1A4B3

Recommended Dilutions:

WB 1:20000-1:100000

IHC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, pig, monkey, goat

**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 : LNCaP cells, HeLa cells, Recombinant protein, HEK-293 cells, Jurkat cells, ROS1728 cells, C6 cells, RAW 264.7 cells, NIH/3T3 cells, HepG2 cells, K-562 cells, HSC-T6 cells, 4T1 cells

IHC : human ovary tumor tissue,

## Background Information

HSPA8 (also known as HSC70) is a member of the HSPA (HSP70) family of heat-shock proteins which are highly conserved chaperons implicated in protein folding, protein refolding, protein transport, and protein targeting. HSPA8 is a constitutively expressed cytosol/nuclear protein able to translocate between cytoplasm and nucleus. Recently it has been reported that HSPA8 can interact with  $\alpha$ -synuclein, the critical pathological protein of Parkinson's disease, indicating its implication in neurodegenerative disease. (PMID: 21832061)

## Notable Publications

Author	Pubmed ID	Journal	Application
Zhipeng Sun	36499219	Int J Mol Sci	WB
Yongjie Wang	33761934	Cell Commun Signal	WB
Maya Suzuki	36648092	FEBS Open Bio	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

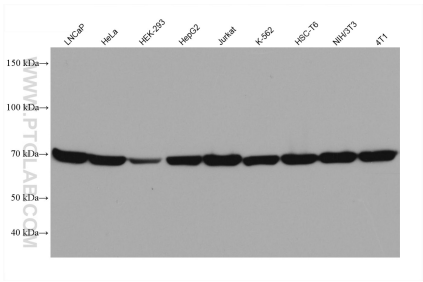
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

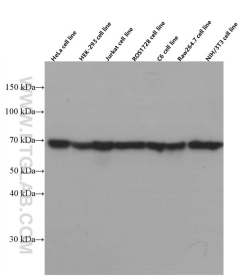
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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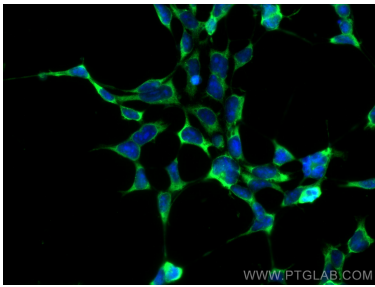
Selected Validation Data



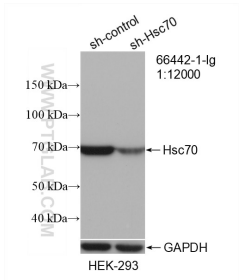
Various lysates were subjected to SDS PAGE followed by western blot with 66442-1-Ig (Hsc70 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



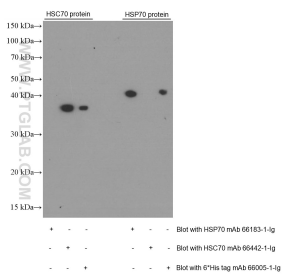
Western blot analysis of Hsc70 in various cell lines using 66442-1-Ig (Hsc70 Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



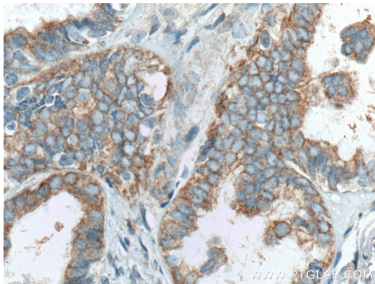
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using Hsc70 antibody (66442-1-Ig, Clone: 1A4B3 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



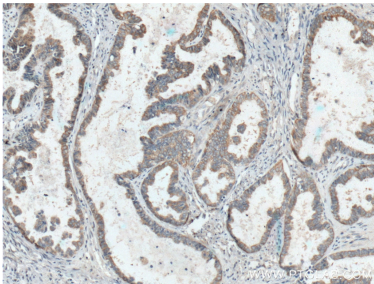
WB result of Hsc70 antibody (66442-1-Ig; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Hsc70 transfected HEK-293 cells.



6\*His tagged-recombinant HSP70 (291-641 aa) and HSC70 (346-646 aa) proteins were subjected to SDS PAGE followed by western blot with 66183-1-Ig (HSP70 antibody), 66442-1-Ig (HSC70 antibody), and 66005-1-Ig (His antibody), respectively, at dilution of 1:50000, incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66442-1-Ig (Hsc70 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66442-1-Ig (Hsc70 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).