### For Research Use Only

# Hsc70 Monoclonal antibody

Catalog Number:66442-1-lg Featured Product

10 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 66442-1-lg BC007276 GeneID (NCBI): Concentration: 1000 ug/ml 3312 **UNIPROT ID:** Source:

Mouse P11142 Full Name: Isotype:

lgG1 heat shock 70kDa protein 8

Calculated MW: Immunogen Catalog Number: AG17910 70 kDa

> Observed MW: 70 kDa

**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

**Purification Method:** 

Protein G purification

CloneNo.: 1A4B3

Recommended Dilutions: WB 1:20000-1:100000 IHC 1:50-1:500

#### **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

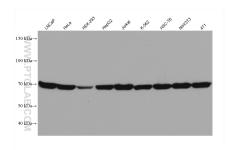
Storage:

Store at -20°C. Stable for one year after shipment.

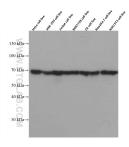
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

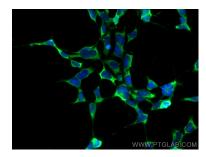
### Selected Validation Data



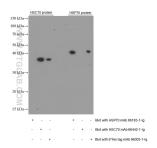
Various lysates were subjected to SDS PAGE followed by western blot with 66442-1-lg (Hsc70 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



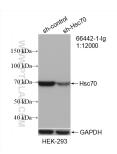
Western blot analysis of Hsc70 in various cell lines using 66442-1-1g (Hsc70 Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



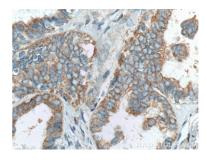
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using Hsc70 antibody (66442-1-Ig, Clone: 1A4B3) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



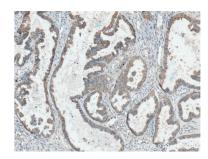
6\*His tagged-recombinant HSP70 (291-641 aa) and HSC70 (346-646 aa) proteins were subjected to SDS PAGE followed by western blot with 66183-1-lg (HSP70 antibody), 66442-1-lg (HSC70 antibody), and 66005-1-lg (His antibody), respectively, at dilution of 1:50000, incubated at room temperature for 1.5 hours.



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



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



Immunohistochemical analysis of paraffinembedded 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).