Product datasheet

Anti-HSP70 Antibody (Clone#3H5)

Catalog Number: *M00949-2*

BOSTER®
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

Basic Information

Product Name	Anti-HSP70 Antibody (Clone#3H5)
Gene Name	HSPA1A
Source	Mouse
Clonality	Monoclonal
Isotype	IgG1
Species Reactivity	human
Tested Application	WB, IHC, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Hsp70, different from the related mouse sequence by five amino acids, and from the related rat sequence by three amino acids.
Concentration	500 ug/ml
Purification	protein G purified.
Observed MW	70 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt，-20℃ as supplied.

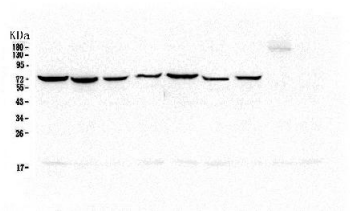
Background Information

HSPA1 (heat shock 70kDa protein 1A) also known as HSP70-1, HSPA1A, HSP70-1A, HSP72 or HSP70I, is a protein that in humans is encoded by the HSPA1A gene. This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. The HSPA1A gene encodes a predicted 641-amino acid protein. The HSPA1 gene is mapped on 6p21.33. Shimizu et al. (1999) found that peripheral blood mononuclear cells of 18 major depression patients expressed a short HSPA1A transcript that utilized exon 1 rather than exon 2, which is found in the more

BOSTER®
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

common HSPA1A transcript. No protein was associated with expression of this short HSPA1A mRNA, possibly due to lack of a TATA box or loss of internal ribosome binding sites. Treatment with BGP-15, a pharmacologic inducer of Hsp72 that can protect against obesity-induced insulin resistance, improved muscular architecture, strength, and contractile function in severely affected diaphragm muscles in mdx dystrophic mice.

Selected Validation Data

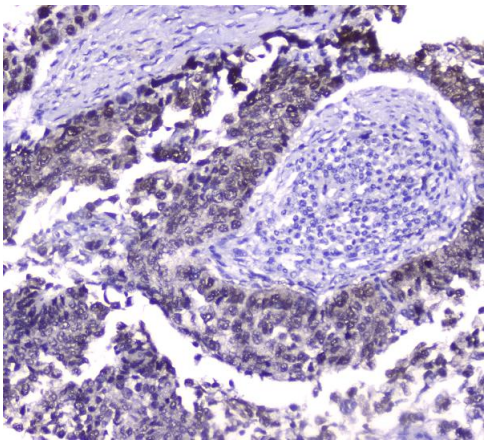


Western blot analysis of anti-HSP70 antibody (M00949-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human COLO-320 whole cell lysates,
Lane 3: human SW620 whole cell lysates,
Lane 4: human A431 whole cell lysates,
Lane 5: human A549 whole cell lysates,
Lane 6: human HepG2 whole cell lysates,
Lane 7: human PANC-1 whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-HSP70 antigen affinity purified monoclonal antibody (M00949-2) and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HSP70 at approximately 70 kDa. The expected band size for HSP70 is at 70 kDa.

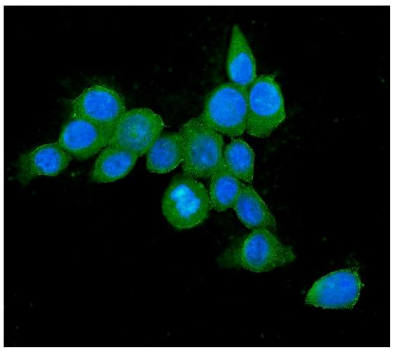
Anti-HSP70 Antibody (Clone#3H5)

Catalog Number: *M00949-2*

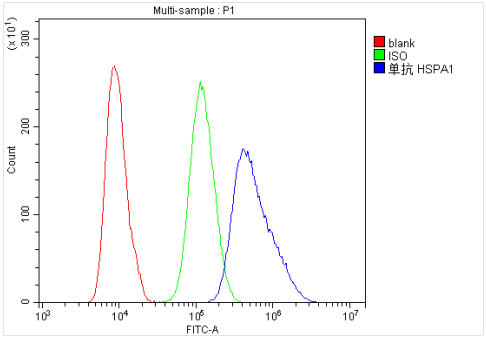
BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com



IHC analysis of HSP70 using anti-HSP70 antibody (M00949-2).
HSP70 was detected in a paraffin-embedded section of human lung cancer tissue. The tissue section was incubated with mouse anti-HSP70 Antibody (M00949-2) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of HSP70 using anti-HSP70 antibody (M00949-2).
HSP70 was detected in an immunocytochemical section of MCF-7 cells. Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U2OS cells using anti-HSP70 antibody (M00949-2).
Overlay histogram showing U2OS cells stained with A04887-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-HSP70 Antibody ((M00949-2, 1:100). Fluoro488 conjugated goat anti-mouse IgG (BA1126, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was mouse IgG (Catalog # BA1046) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.