

Basic Information

Product Name	Anti-HSP70 Antibody
Gene Name	HSPA1A
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC/IF
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 four amino acids and from the related rat sequence by three amino acids.
Concentration	500 ug/ml
Purification	Immunogen affinity 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 (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°C as supplied.

Background Information

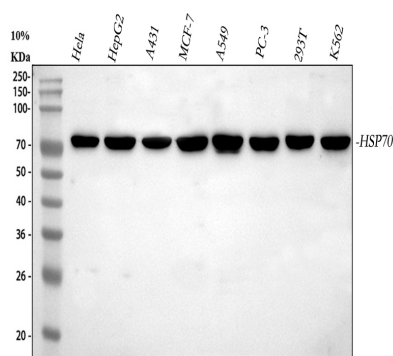
HSPA1(heat shock 70kDa protein 1A) also known as HSP70-1, HSPA1A, HSP70-1A, HSP72 or HSP70I, is a protein that in humans is encoded by the HSPA1A gene. This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. The HSPA1A gene encodes a predicted 641-amino 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

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.

Reference

Anti-HSP70 Antibody被引用在2文献中。

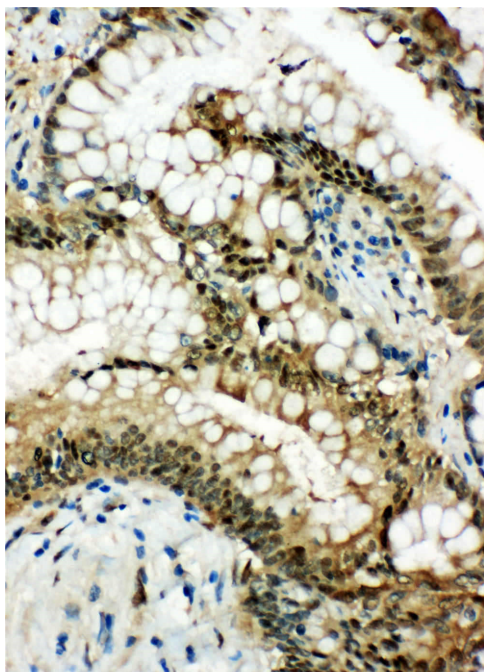
Selected Validation Data



Western blot analysis of HSP70 using anti-HSP70 antibody (BA3769). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

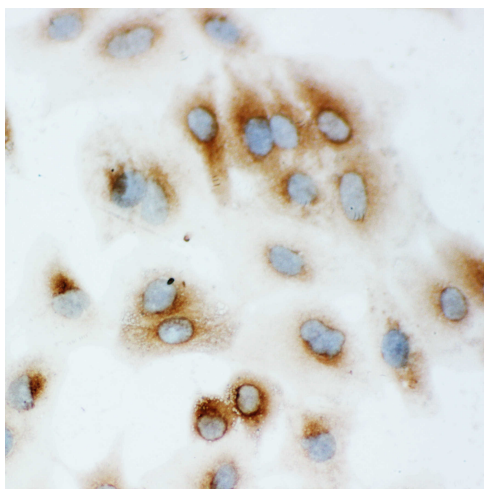
Lane 1: human HeLa whole cell lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: human A431 whole cell lysates,
Lane 4: human MCF-7 whole cell lysates,
Lane 5: human A549 whole cell lysates,
Lane 6: human PC-3 whole cell lysates,
Lane 7: human 293T whole cell lysates,
Lane 8: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HSP70 antigen affinity purified polyclonal antibody (BA3769) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.



IHC analysis of HSP70 using anti-HSP70 antibody (BA3769).

HSP70 was detected in a paraffin-embedded section of human intestinal cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HSP70 Antibody (BA3769) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC analysis of HSP70 using anti- HSP70 antibody (BA3769).

HSP70 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-HSP70 Antibody (BA3769) at a dilution of 1:100. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.