

Monoclonal anti-human Hsp70 antibody (clone 4E7)

Mouse IgG₁, κ

Cat. No. IBAHS0703

Immunogen: Recombinant human Hsp70 (1-641aa) purified from *E. coli*

NCBI Accession No.: NP_005336

Isotype: Mouse IgG₁ heavy chain and κ light chain

Clone: Anti-human Hsp70 mAb, clone 4E7, is derived from hybridization of mouse SP2/0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human Hsp70 protein.

Description: Hsp70 is a human heat shock protein. Hsp70 is an important part of the cell's machinery for protein folding, and help to protect cells from stress. In most species, there are many proteins that belong to the hsp70 family. Some of these are only expressed under stress conditions, while some are present in cells under normal growth conditions and are not heat-inducible. Hsp70 can be found in different cellular compartments (nuclear, cytosolic, mitochondrial, endoplasmic reticulum, etc...), and the chaperone function of hsp70 is required for protection against stress-induced apoptosis.

Concentration: 1mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol.

Storage: Can be stored at +4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis Immunohistochemistry, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, IHC, Flow cytometry, ICC/IF

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com

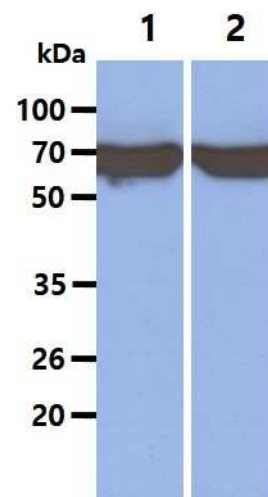
Product information

Western blot analysis

The Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp70 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

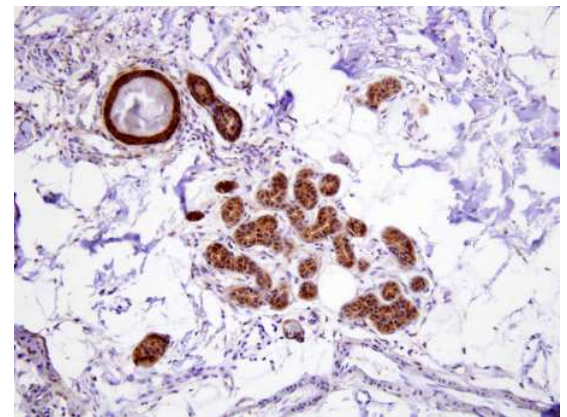
Lane 1.: 293T cell lysate

Lane 2.: HeLa cell lysate



Immunohistochemistry

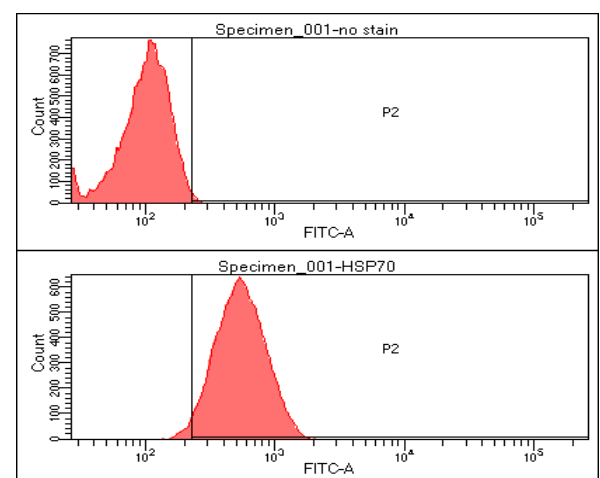
Paraffin embedded sections of human eccrine gland were incubated with anti-human Hsp70 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)



Human eccrine gland

Flow cytometry

Flow cytometry analysis of HSP70 in HSP70 cell line, staining at 2-5ug for 1×10^6 cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.

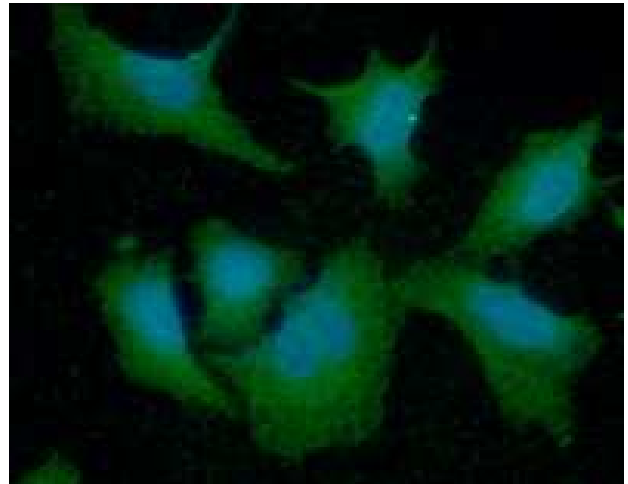


For research use only. This product is not intended or approved for human, diagnostics or veterinary use.

Product information

ICC/IF analysis

ICC/IF analysis of HSP70 in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human HSP70 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



- General references:** Lewis MJ., *et al.* (1985) *EMBO J.* **4**: 3137-3143.
Gething MJ., *et al.* (1992) *Nature.* **355**: 33-45.
Dick DM., *et al.* (2000) *Mol Cell Biol.* **20(19)**: 7146-7159.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.