

## Product datasheet for **AM09017PU-S**

### **HSP70-1A (HSPA1A) Mouse Monoclonal Antibody [Clone ID: 4E7]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	4E7
<b>Applications:</b>	ELISA, IHC, WB
<b>Recommended Dilution:</b>	ELISA. Western blot (1:1,000 - 1:2,000). Immunohistochemistry (1:100 - 1:200).
<b>Reactivity:</b>	Human
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Recombinant human Hsp70 (1-641 aa) purified from E. coli
<b>Specificity:</b>	The antibody recognizes human Hsp70. Other species not tested.
<b>Formulation:</b>	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified Ig fraction
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Protein-G affinity chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	heat shock protein family A (Hsp70) member 1A
<b>Database Link:</b>	<a href="#">Entrez Gene 3303 Human</a> <a href="#">PODMV8</a>



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**Background:**

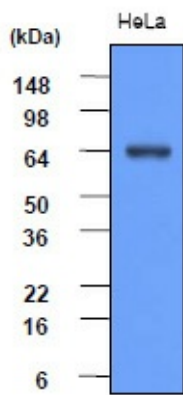
Hsp70 is a human heat shock protein. Hsp70 is an important part of the cell's machinery for protein folding, and help to protect cells from stress. In most species, there are many proteins that belong to the hsp70 family. Some of these are only expressed under stress conditions, while some are present 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.

**Synonyms:**

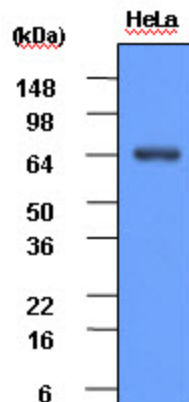
HSP70.1, HSP70-1/HSP70-2, HSPA1A, HSPA1B, HSPA1

**Protein Pathways:**

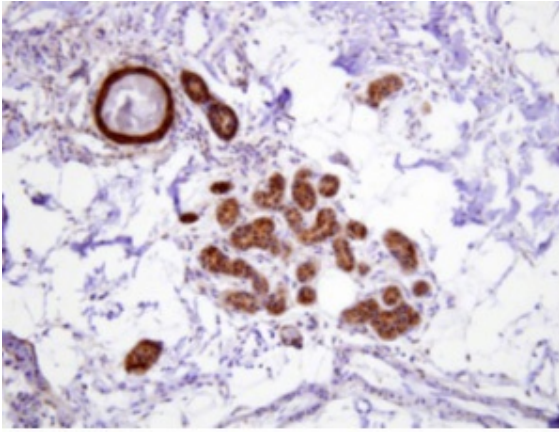
Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Prion diseases, Spliceosome

**Product images:**

HeLa cell lysate (30ug) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp70 (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

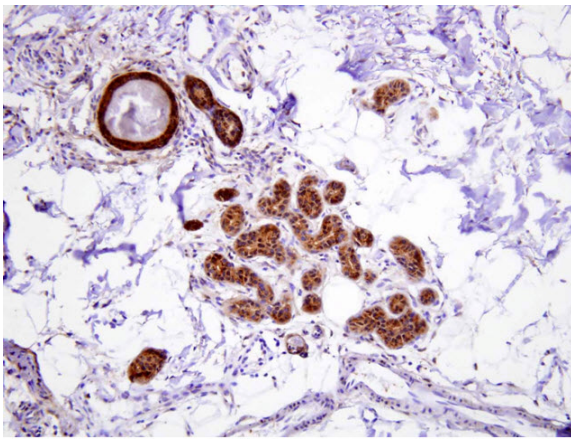


Western blot analysis: HeLa cell lysate (30 ug) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp70 (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Human eccrine gland

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

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 0.1 M sodium citrate buffer and detected using Diaminobenzidine (DAB).