10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# HSPA6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8708b

## Product Information

| | |
|---|---|
| **Application** | IHC-P, FC, WB, E |
| **Primary Accession** | P17066 |
| **Reactivity** | Human |
| **Predicted** | Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB22779 |
| **Calculated MW** | 71028 |
| **Antigen Region** | 544-571 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 3310 |
| **Other Names** | Heat shock 70 kDa protein 6, Heat shock 70 kDa protein B', HSPA6, HSP70B' |
| **Target/Specificity** | This HSPA6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 544-571 amino acids from the C-terminal region of human HSPA6. |
| **Dilution** | IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | HSPA6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | HSPA6 |
| **Synonyms** | HSP70B' |
| **Function** | Molecular chaperone implicated in a wide variety of cellular processes, |

including protection of the proteome from stress, folding and transport of newly synthesized polypeptides, activation of proteolysis of misfolded proteins and the formation and dissociation of protein complexes. Plays a pivotal role in the protein quality control system, ensuring the correct folding of proteins, the re-folding of misfolded proteins and controlling the targeting of proteins for subsequent degradation. This is achieved through cycles of ATP binding, ATP hydrolysis and ADP release, mediated by co-chaperones. The affinity for polypeptides is regulated by its nucleotide bound state. In the ATP-bound form, it has a low affinity for substrate proteins. However, upon hydrolysis of the ATP to ADP, it undergoes a conformational change that increases its affinity for substrate proteins. It goes through repeated cycles of ATP hydrolysis and nucleotide exchange, which permits cycles of substrate binding and release (PubMed:26865365).

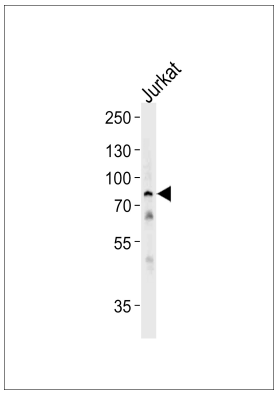
## Background

In cooperation with other chaperones, Hsp70s stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage.

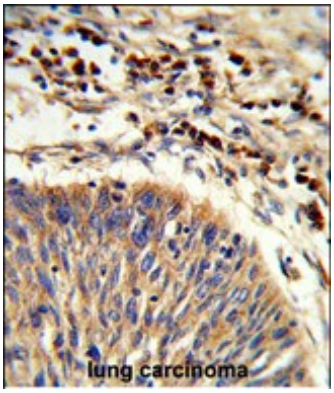
## References

Leung,T.K., et.al.,Genomics 12 (1), 74-79 (1992)

## Images

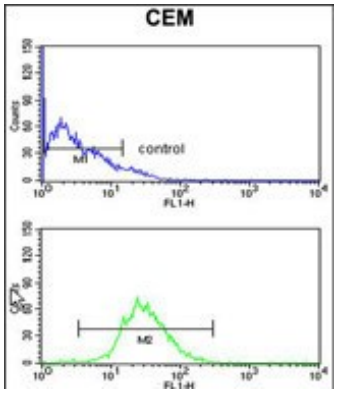



Western blot analysis of lysate from Jurkat cell line,using HSPA6 Antibody (C-term)(Cat. #AP8708b).AP8708b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug per lane.




Formalin-fixed and paraffin-embedded human lung carcinoma reacted with HSPA6 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

HSPA6 Antibody (C-term) (Cat. #AP8708b) flow cytometry analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated




goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.