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HSPA8 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2872b

Specification

HSPA8 Antibody (C-term) - Product Information

Application	**IF, WB, IHC-P, FC,E**
Primary Accession	P11142
Other Accession	P63018, P63017, P19378, P19120, A2Q0Z1
Reactivity	**Human, Mouse**
Predicted	**Bovine, Hamster, Horse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**539-569**

HSPA8 Antibody (C-term) - Additional Information

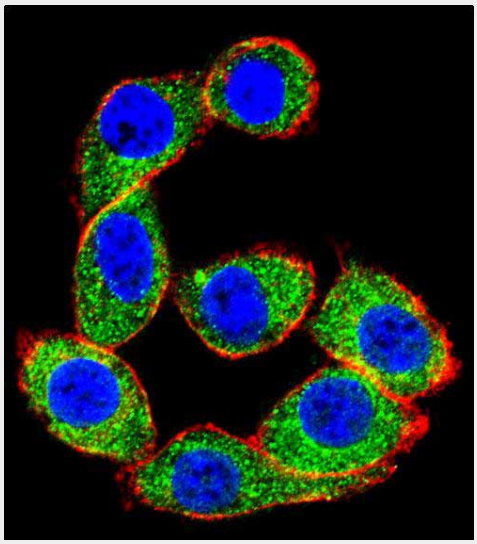
Gene ID 3312

Other Names
Heat shock cognate 71 kDa protein, Heat shock 70 kDa protein 8, Lipopolysaccharide-associated protein 1, LAP-1, LPS-associated protein 1, HSPA8, HSC70, HSP73, HSPA10

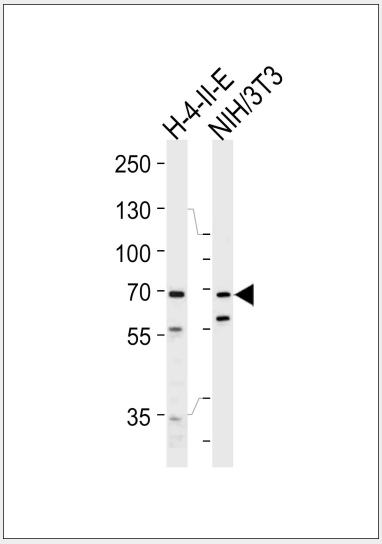
Target/Specificity
This HSPA8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 539-569 amino acids from the C-terminal region of human HSPA8.

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.



Confocal immunofluorescent analysis of HSPA8 Antibody (C-term)(Cat#AP2872b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).



Western blot analysis of lysates from rat H-4-II-E, mouse NIH/3T3 cell line (from left to right), using HSPA8 Antibody (C-term) (Cat. # AP2872b). AP2872b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at

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.

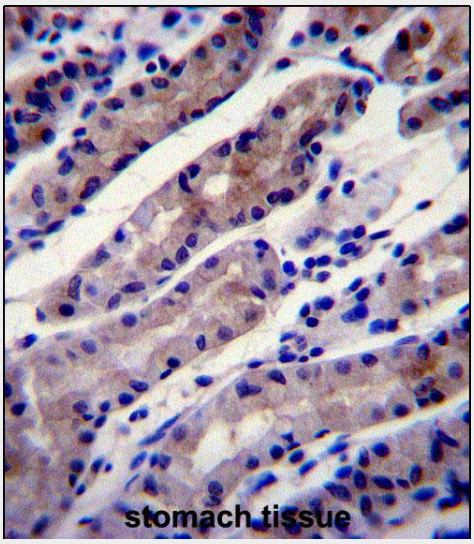
Precautions
HSPA8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HSPA8 Antibody (C-term) - Protein Information

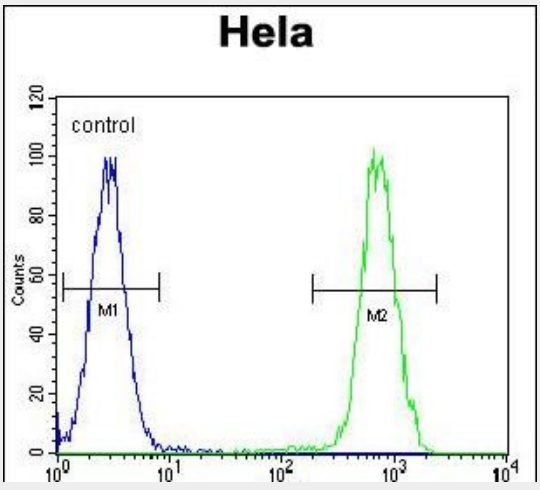
Name HSPA8 (HGNC:5241)

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 (PubMed:21150129, PubMed:21148293, PubMed:24732912, PubMed:27916661, PubMed:23018488). This is achieved through cycles of ATP binding, ATP hydrolysis and ADP release, mediated by co-chaperones (PubMed:21150129, PubMed:21148293, PubMed:24732912, PubMed:<a href="http://www.uniprot.org/citations/27916661"

1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



HSPA8 Antibody (C-term) (Cat. #AP2872b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of HSPA8 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



HSPA8 Antibody (C-term) (Cat. #AP2872b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HSPA8 Antibody (C-term) - Background

HSPA8 belongs to the heat shock protein 70

target="_blank">27916661, PubMed:23018488, PubMed:12526792). The co-chaperones have been shown to not only regulate different steps of the ATPase cycle of HSP70, but they also have an individual specificity such that one co-chaperone may promote folding of a substrate while another may promote degradation (PubMed:21150129, PubMed:21148293, PubMed:24732912, PubMed:27916661, PubMed:23018488, PubMed:12526792). The affinity of HSP70 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. HSP70 goes through repeated cycles of ATP hydrolysis and nucleotide exchange, which permits cycles of substrate binding and release. The HSP70-associated co-chaperones are of three types: J- domain co-chaperones HSP40s (stimulate ATPase hydrolysis by HSP70), the nucleotide exchange factors (NEF) such as BAG1/2/3 (facilitate conversion of HSP70 from the ADP-bound to the ATP-bound state thereby promoting substrate release), and the TPR domain chaperones such as HOPX and STUB1 (PubMed:24318877, PubMed:27474739, PubMed:<a href="http://www.uniprot.org/ci

family which contains both heat-inducible and constitutively expressed members. The latter are called heat-shock cognate proteins. HSPA8 is a heat-shock cognate protein. This protein binds to nascent polypeptides to facilitate correct folding. The protein also functions as an ATPase in the disassembly of clathrin-coated vesicles during transport of membrane components through the cell.

HSPA8 Antibody (C-term) - References

Tsukahara F., Yoshioka T.Mol. Pharmacol. 58:1257-1263(2000)
Egerton M., Moritz R.L.Biochem. Biophys. Res. Commun. 224:666-674(1996)

tations/24121476" target="_blank">24121476, PubMed:26865365). Plays a critical role in mitochondrial import, delivers preproteins to the mitochondrial import receptor TOMM70 (PubMed:12526792). Acts as a repressor of transcriptional activation. Inhibits the transcriptional coactivator activity of CITED1 on Smad- mediated transcription. Component of the PRP19-CDC5L complex that forms an integral part of the spliceosome and is required for activating pre- mRNA splicing. May have a scaffolding role in the spliceosome assembly as it contacts all other components of the core complex. Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:10722728, PubMed:11276205). Participates in the ER-associated degradation (ERAD) quality control pathway in conjunction with J domain-containing co-chaperones and the E3 ligase STUB1 (PubMed:23990462). Interacts with VGF-derived peptide TLQP-21 (PubMed:28934328).

Cellular Location
Cytoplasm. Melanosome. Nucleus, nucleolus. Cell membrane. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Translocates rapidly from the cytoplasm to the nuclei, and especially to the nucleoli, upon heat shock

Tissue Location
Ubiquitous..

HSPA8 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture