

[KO]HspA2 Rabbit mAb

Catalog # AP75586

Product Information

Application	WB, IHC-P
Primary Accession	P54652
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	70021

Additional Information

Gene ID	3306
Other Names	HSPA2
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	HSPA2
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). Plays a role in spermatogenesis. In association with SHCBP1L may participate in the maintenance of spindle

integrity during meiosis in male germ cells (By similarity).

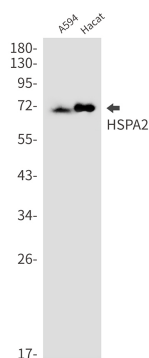
Cellular Location

Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:P17156}.
Note=Colocalizes with SHCBP1L at spindle during the meiosis process.
{ECO:0000250|UniProtKB:P17156}

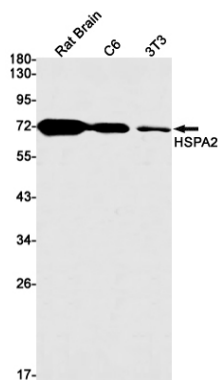
Background

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.

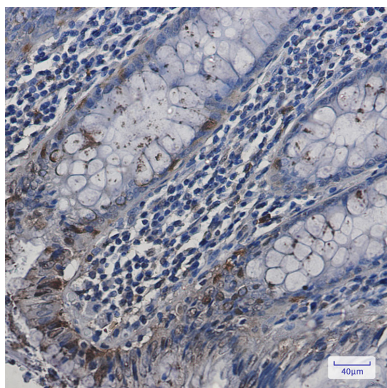
Images



Western blot analysis of HSPA2 in A549, Hacat lysates using HspA2 antibody.



Western blot analysis of HSPA2 in rat Brain, C6, 3T3 lysates using HSPA2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using HSPA2 antibody.
High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

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