

# HSPA2 Antibody

Rabbit mAb

Catalog # AP90967

## Product Information

<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">P54652</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	HSPA2; Heat shock 70kD protein 2; HSP70-2; HSP70-3; Heat shock 70 kDa protein 2; Heat shock 70kDa protein 2;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	70021

## Additional Information

<b>Dilution</b>	WB 1:1000~1:2000 IHC 1:50~1:200
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human HSPA2
<b>Description</b>	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.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

<b>Name</b>	HSPA2
<b>Function</b>	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

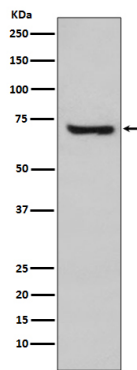
binding and release (PubMed:[26865365](#)). Plays a role in spermatogenesis. In association with SHCBP1L may participate in the maintenance of spindle integrity during meiosis in male germ cells (By similarity).

#### Cellular Location

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

## Images

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Western blot analysis of HSPA2 expression in MCF-7 cell lysate.

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