

HSPA2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56941

Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession P54652

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 70021
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human HSPA2

Epitope Specificity 451-550/639

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the heat shock protein 70 family.

SUBUNIT Interacts with ZNF541. Component of the CatSper complex. Interacts with

RABL2/RABL2A; binds preferentially to GTP-bound RABL2. Interacts with

FKRP6

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Additional Information

Gene ID 3306

Other Names Heat shock-related 70 kDa protein 2, Heat shock 70 kDa protein 2, HSPA2

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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}

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