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HSPA2 Antibody (C-term C577) Blocking Peptide

Synthetic peptide
Catalog # BP2858b

Specification

HSPA2 Antibody (C-term C577) Blocking Peptide - Product Information

Primary Accession P54652

HSPA2 Antibody (C-term C577) Blocking Peptide - Additional Information

Gene ID 3306

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2858b was selected from the C-term region of human HSPA2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HSPA2 Antibody (C-term C577) Blocking Peptide - 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}

HSPA2 Antibody (C-term C577) Blocking Peptide - Protocols

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

- Blocking Peptides

HSPA2 Antibody (C-term C577) Blocking Peptide - Images

HSPA2 Antibody (C-term C577) Blocking Peptide - 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.

HSPA2 Antibody (C-term C577) Blocking Peptide - References

Bonnycastle L.L.C., Yu C.-E., Hunt C.R., Trask B.J.,Genomics 23:85-93(1994)Roux A.-F., Nguyen V.T.T., Squire J.A., Cox D.W.Hum. Mol. Genet. 3:1819-1822(1994)Rikova K., Guo A., Zeng Q., Possemato A., Yu J., Haack H., Nardone J., Lee K., Cell 131:1190-1203(2007)