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## Product datasheet for TP509622

## OriGene Technologies, Inc.

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## Hspa2 (NM_008301) Mouse Recombinant Protein

## Product data:

Product Type:
Description:

Species:
Expression Host:
Expression cDNA Clone
or AA Sequence:

## Recombinant Proteins

Purified recombinant protein of Mouse heat shock protein 2 (Hspa2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Mouse
HEK293T
>MR209622 representing NM_008301
Red=Cloning site Green=Tags(s)

MSARGPAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVAMNPTNTIFD AKRLIGRKFEDATVQSDMKHWPFRVVSEGGKPKVQVEYKGEMKTFFPEEISSMVLTKMKEIAEAYLGGKV QSAVITVPAYFNDSQRQATKDAGTITGLNVLRIINEPTAAAIAYGLDKKGCAGGEKNVLIFDLGGGTFDV SILTIEDGIFEVKSTAGDTHLGGEDFDNRMVSHLAEEFKRKHKKDIGPNKRAVRRLRTACERAKRTLSSS TQASIEIDSLYEGVDFYTSITRARFEELNADLFRGTLEPVEKALRDAKLDKGQIQEIVLVGGSTRIPKIQ KLLQDFFNGKELNKSINPDEAVAYGAAVQAAILIGDKSENVQDLLLLDVTPLSLGIETAGGVMTPLIKRN TTIPTKQTQTFTTYSDNQSSVLVQVYEGERAMTKDNNLLGKFDLTGIPPAPRGVPQIEVTFDIDANGILN VTAADKSTGKENKITITNDKGRLSKDDIDRMVQEAERYKSEDEANRDRVAAKNAVESYTYNIKQTVEDEK LRGKISEQDKNKILDKCQEVINWLDRNQMAEKDEYEHKQKELERVCNPIISKLYQGGPGGGGSSGGPTIE EVD

## TRTRPLEQKLISEEDLAANDILDYKDDDDKV

## Tag: C-MYC/DDK

Predicted MW:
70.1 kDa

Concentration:
$>0.05 \mu \mathrm{~g} / \mu \mathrm{L}$ as determined by microplate BCA method
$>80 \%$ as determined by SDS-PAGE and Coomassie blue staining
25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10\% glycerol
Buffer:
For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Storage:
Stability:

Store at $-80^{\circ} \mathrm{C}$ after receiving vials.
Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

| RefSeq: | NP 032327 |
| :---: | :---: |
| Locus ID: | 15512 |
| UniProt ID: | P17156 |
| RefSeq Size: | 2595 |
| Cytogenetics: | 1233.73 cM |
| RefSeq ORF: | 1899 |
| Synonyms: | 70kDa; Hsp70-2; HSP70.2; HSP70A2 |
| Summary: | 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 (By similarity). Plays a role in spermatogenesis (PubMed:24557841). In association with SHCBP1L may participate in the maintenance of spindle integrity during meiosis in male germ cells (PubMed:24557841).[UniProtKB/Swiss-Prot Function] |

