

## **Product datasheet for TP307795M**

## OriGene Technologies, Inc.

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### **HSPA6 (NM 002155) Human Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human heat shock 70kDa protein 6 (HSP70B') (HSPA6), 100 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC207795 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MQAPRELAVGIDLGTTYSCVGVFQQGRVEILANDQGNRTTPSYVAFTDTERLVGDAAKSQAALNPHNTVF DAKRLIGRKFADTTVQSDMKHWPFRVVSEGGKPKVRVCYRGEDKTFYPEEISSMVLSKMKETAEAYLGQP VKHAVITVPAYFNDSQRQATKDAGAIAGLNVLRIINEPTAAAIAYGLDRRGAGERNVLIFDLGGGTFDVS VLSIDAGVFEVKATAGDTHLGGEDFDNRLVNHFMEEFRRKHGKDLSGNKRALRRLRTACERAKRTLSSST QATLEIDSLFEGVDFYTSITRARFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDVVLVGGSTRIPKVQK LLQDFFNGKELNKSINPDEAVAYGAAVQAAVLMGDKCEKVQDLLLLDVAPLSLGLETAGGVMTTLIQRNA TIPTKQTQTFTTYSDNQPGVFIQVYEGERAMTKDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILSV TATDRSTGKANKITITNDKGRLSKEEVERMVHEAEQYKAEDEAQRDRVAAKNSLEAHVFHVKGSLQEESL RDKIPEEDRRKMQDKCREVLAWLEHNQLAEKEEYEHQKRELEQICRPIFSRLYGGPGVPGGSSCGTQARQ

**GDPSTGPIIEEVD** 

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 70.8 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



#### HSPA6 (NM\_002155) Human Recombinant Protein - TP307795M

Stability: 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 002146

**Locus ID:** 3310

UniProt ID: <u>P17066, A0A384NKX5, B3KSM6</u>

RefSeq Size: 2664
Cytogenetics: 1q23.3
RefSeq ORF: 1929
Synonyms: HSP70B'

Summary: Molecular chaperone implicated in a wide variety of cellular processes, including protection of

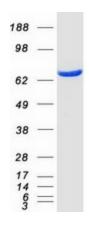
the proteome from stress, folding and transport of newly synthesized polypeptides, activation of proteolysis of misfolded proteins and the formation and dissociation of protein complexes. Plays a pivotal role in the protein quality control system, ensuring the correct folding of proteins, the re-folding 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

(PubMed:26865365).[UniProtKB/Swiss-Prot Function]

Protein Pathways: Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Spliceosome

# **Product images:**



Coomassie blue staining of purified HSPA6 protein (Cat# [TP307795]). The protein was produced from HEK293T cells transfected with HSPA6 cDNA clone (Cat# [RC207795]) using MegaTran 2.0 (Cat# [TT210002]).