

Product datasheet for RC207795L3V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

HSPA6 (NM 002155) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: HSPA6 (NM_002155) Human Tagged ORF Clone Lentiviral Particle

Symbol: HSP70B' Synonyms: **Mammalian Cell**

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Myc-DDK Tag: NM 002155 ACCN: **ORF Size:** 1929 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC207795).

Sequence:

Domains:

The molecular sequence of this clone aligns with the gene accession number as a point of OTI Disclaimer: reference only. However, individual transcript sequences of the same gene can differ through

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: NM 002155.3, NP 002146.2

HSP70

RefSeq Size: 2664 bp RefSeq ORF: 1932 bp Locus ID: 3310 **UniProt ID:** P17066 Cytogenetics: 1q23.3

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





MW:

ORIGENE

71 kDa

Gene 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]