

## Product datasheet for **RC202891**

### Cpn10 (HSPE1) (NM\_002157) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cpn10 (HSPE1) (NM\_002157) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cpn10  
**Synonyms:** CPN10; EPF; GROES; HSP10  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202891 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGACAAGCGTTTAGAAAGTTTCTTCCACTCTTTGACCGAGTATTGGTTGAAAGGAGTGCTGCTG  
AAACTGTAACCAAAGGAGGCATTATGCTTCCAGAAAAATCTCAAGGAAAAGTATTGCAAGCAACAGTAGT  
CGCTGTTGGATCGGGTTCTAAAGGAAAGGGTGGAGAGATTCAACCAGTTAGCGTGAAAGTTGGAGATAAA  
GTTCTTCTCCAGAATATGGAGGCACAAAGTAGTTCTAGATGACAAGGATTATTTCTATTTAGAGATG  
GTGACATTCTTGAAAGTACGTAGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202891 protein sequence  
 Red=Cloning site Green=Tags(s)  
 MAGQAFRKFLPLFDRVLVERSAAETVTKGGIMLPEKSQGVQLQATVVAVGSGSKGKGGEIQVSVKVGDK  
 VLLPEYGGTKVLLDDKDYFLFRDGDILGKYVD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6064\\_a08.zip](https://cdn.origene.com/chromatograms/mk6064_a08.zip)

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_002157

**ORF Size:** 306 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of 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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_002157.3](#)

**RefSeq Size:** 965 bp

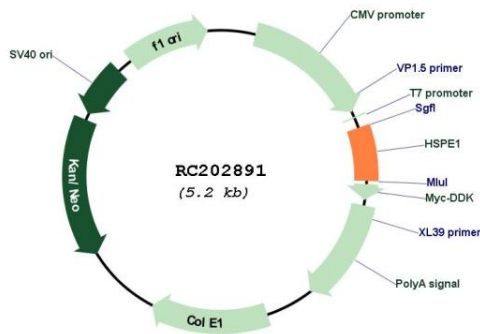
**RefSeq ORF:** 309 bp

**Locus ID:** 3336

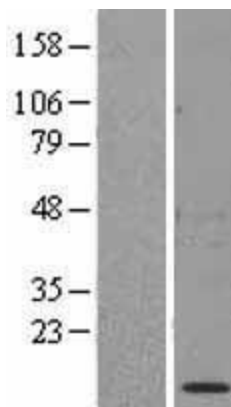
UniProt ID: [P61604](#)  
 Cytogenetics: 2q33.1  
 Domains: cpn10  
 Protein Families: Druggable Genome, Stem cell - Pluripotency  
 MW: 10.9 kDa

**Gene Summary:** This gene encodes a major heat shock protein which functions as a chaperonin. Its structure consists of a heptameric ring which binds to another heat shock protein in order to form a symmetric, functional heterodimer which enhances protein folding in an ATP-dependent manner. This gene and its co-chaperonin, HSPD1, are arranged in a head-to-head orientation on chromosome 2. Naturally occurring read-through transcription occurs between this locus and the neighboring locus MOBKL3.[provided by RefSeq, Feb 2011]

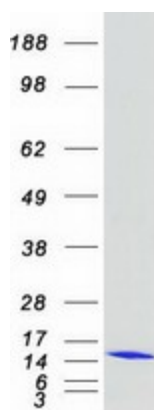
**Product images:**



Circular map for RC202891



Western blot validation of overexpression lysate (Cat# [LY419493]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202891 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSPE1 protein (Cat# [TP302891]). The protein was produced from HEK293T cells transfected with HSPE1 cDNA clone (Cat# RC202891) using MegaTran 2.0 (Cat# [TT210002]).