

Product datasheet for **RG201040**

Hsp22 (HSPB8) (NM_014365) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hsp22 (HSPB8) (NM_014365) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Hsp22
Synonyms: CMT2L; DHMN2; E2IG1; H11; HMN2; HMN2A; HSP22
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201040 representing NM_014365
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAACTACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGACGGTCAGATGCCCTTCTCCTGCCACTACCAAGCCGCCTGCGCCGAGACCCCTTCCGGGACT
 CTCCCCTCTCCTCTCGCTGCTGGATGATGGCTTTGGCATGGACCCCTTCCAGACGACTTGACAGCCTC
 TTGGCCCGACTGGGCTCTGCCTCGTCTCTCCTCCGCCTGGCCAGGCACCCTAAGGTCGGGCATGGTGCCC
 CGGGGCCCACTGCCACCGCCAGGTTTGGGTGCCTGCCAGGGCAGGACCCCCACCCTTCCCTGGGG
 AGCCCTGGAAGTGTGTGAATGTGCACAGCTTCAAGCCAGAGGAGTTGATGGTGAAGACCAAAGATGG
 ATACGTGGAGGTGTCTGGCAAACATGAAGAGAAACAGCAAGAAGGTGGCATTGTTTCTAAGAACTTCACA
 AAGAAAATCCAGTTCCTGCAGAGGTGGATCCTGTGACAGTATTTGCCTCACTTTCCCCAGAGGGTCTGC
 TGATCATCGAAGCTCCCCAGGTCCCTCCTTACTCAACATTTGGAGAGAGCAGTTTCAACAACGAGCTTCC
 CCAGGACAGCCAGGAAGTCACCTGTACC

A**CGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201040 representing NM_014365
 Red=Cloning site Green=Tags(s)

MADGQMPFSCHYPSRLRRDPFRDSPLSSRLDDGFMDPFPDDL TASWPDWALPRLSSAWPGTLRSGMVP
 RGPTATARFGVPAEGRTPPFPGEPPKVCNVHFSKPEELMVKTKDGYVEVSGKHEEKQEGGIVSKNFT
 KKIQLPAEVDPTVFASLSPEGLLIIEAPQVPPYSTFGESSFNNELPQDSQEVCT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:



ACCN: NM_014365

ORF Size: 588 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_014365.3](#)

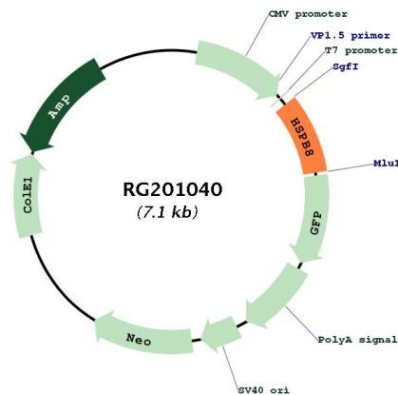
RefSeq Size: 2056 bp

RefSeq ORF: 591 bp

Locus ID: 26353

UniProt ID:	<u>Q9UJY1</u>
Cytogenetics:	12q24.23
Domains:	HSP20
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	The protein encoded by this gene belongs to the superfamily of small heat-shock proteins containing a conservative alpha-crystallin domain at the C-terminal part of the molecule. The expression of this gene is induced by estrogen in estrogen receptor-positive breast cancer cells, and this protein also functions as a chaperone in association with Bag3, a stimulator of macroautophagy. Thus, this gene appears to be involved in regulation of cell proliferation, apoptosis, and carcinogenesis, and mutations in this gene have been associated with different neuromuscular diseases, including Charcot-Marie-Tooth disease. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201040