

Product datasheet for **RG201399**

HSBP1 (NM_001537) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HSBP1 (NM_001537) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: HSBP1
Synonyms: NPC-A-13
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201399 representing NM_001537
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGAGACTGACCCCAAGACCGTGCAGGACCTCACCTCGGTGGTGCAGACACTCCTGCAGCAGATGC
AAGATAAATTTTCAGACCATGTCTGACCAGATCATTGGGAGAATTGATGATATGAGTAGTCGCATTGATGA
TCTGGAAAAGAATATCGCGGACCTCATGACACAGGCTGGGGTGAAGAAGTGGAAAGTAAAACAAGATA
CCTGCCACGCAAAGAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201399 representing NM_001537
Red=Cloning site Green=Tags(s)

MAETDPKTVQDLTSVVQTLTLLQQMQDKFQTMSDQIIIGRIDDMSSRIDDLKNIADLMTQAGVEELESNKI
PATQKS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001537

ORF Size: 228 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.

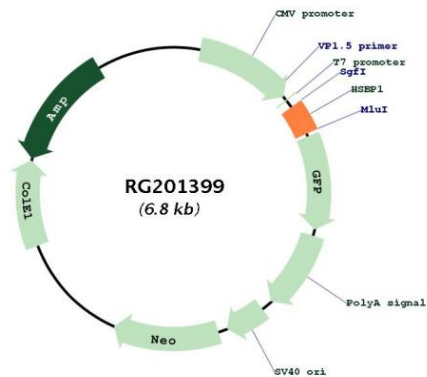
RefSeq: [NM_001537.4](#)

RefSeq Size: 1919 bp

RefSeq ORF: 231 bp
 Locus ID: 3281
 UniProt ID: [O75506](#)
 Cytogenetics: 16q23.3
 Protein Families: Transcription Factors
 Gene Summary:

The heat-shock response is elicited by exposure of cells to thermal and chemical stress and through the activation of HSFs (heat shock factors) results in the elevated expression of heat-shock induced genes. Heat shock factor binding protein 1 (HSBP1), is a 76-amino-acid protein that binds to heat shock factor 1(HSF1), which is a transcription factor involved in the HS response. During HS response, HSF1 undergoes conformational transition from an inert non-DNA-binding monomer to active functional trimers. HSBP1 is nuclear-localized and interacts with the active trimeric state of HSF1 to negatively regulate HSF1 DNA-binding activity. Overexpression of HSBP1 in mammalian cells represses the transactivation activity of HSF1. When overexpressed in C.elegans HSBP1 has severe effects on survival of the animals after thermal and chemical stress consistent with a role of HSBP1 as a negative regulator of heat shock response. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201399