

Product datasheet for **RC229318**

GSPT1 (NM_002094) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GSPT1 (NM_002094) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GSPT1
Synonyms:	551G9.2; eRF3a; ETF3A; GST1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC229318 representing NM_002094
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGATCCGGGCAGTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGAGCAGCAGCGGCAGCAGCAGCA
GCGACTCGGCGCCTGACTGCTGGGACCAGGCGGACATGGAAGCCCCGGGCCGGCCCTTGGCGGCGCGG
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AGACTTCCCTCAGATGGGTCTTTACCTTAAGAGATGAGGGTAAGACCATTGCAATTGGAAAAGTTCTG
AAACTGGTTCCAGAGAAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229318 representing NM_002094
Red=Cloning site Green=Tags(s)

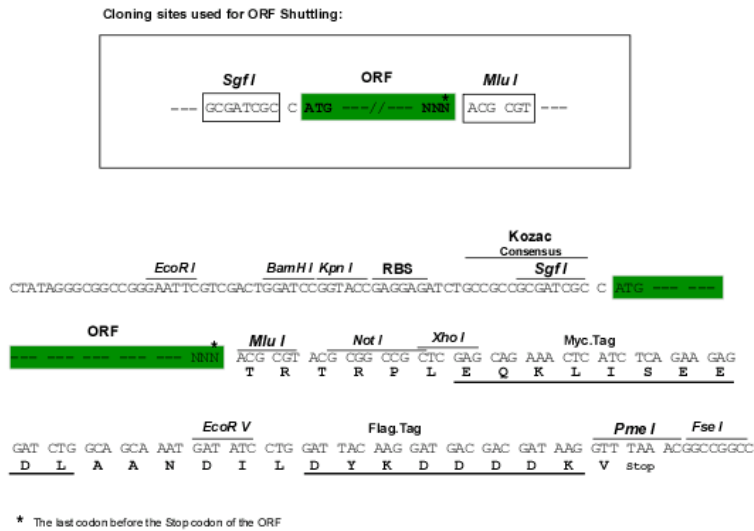
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 LSEPIVENGETEMSPESWEHKEEISEAEPGGGSLGDRPPEESAHEMEEEEEEIPKPKSVVAPPGAPKK
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 GRAYFETEKKHFTILDAPGHKSFVPMIGGASQADLAVLVI SARKGEFETGFEEKGGQTRHAMLAKTAGV
 KHLIVL INKMDDPTVNSNERYECKEKLVPFLKKG VFNPKDIHFMPCSGLTGANLKEQSDFCPWYIGL
 PFIPLYLDNLPNFRSVDGP IRLPIVDKYKDMGTVVLGKLESGSICKGQQLVMPNKHNV EVLGILSDDVE
 TDTVPAGENLKIRLKGIEEEEILPGFILCDPNLCHSGRTFDAQIVIEHKSIICPGYNV LHIHTCIEE
 VEITALICLV DKKSGEKS KTRPRFVKQDQVCIARLRTAGTICLETFKDFPQMGRFTLRDEGKTIAIGKVL
 KLVPEKD

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8007_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002094

ORF Size: 1911 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_002094.3](#), [NP_002085.2](#)

RefSeq ORF: 1914 bp

Locus ID: 2935

Cytogenetics: 16p13.13

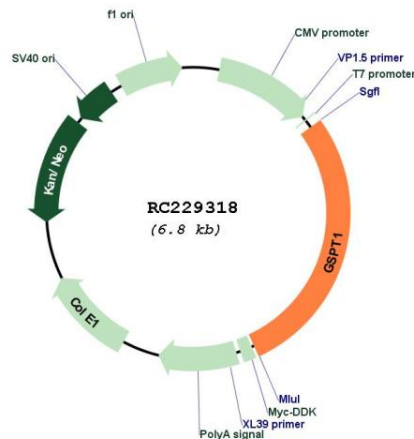
Domains: GTP_EFTU, GTP_EFTU_D3, GTP_EFTU_D2

Protein Families: Transmembrane

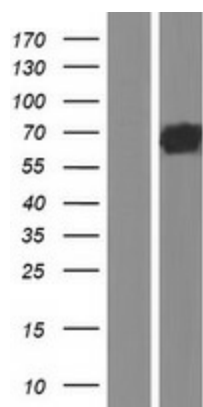
MW: 68.5 kDa

Gene Summary: Involved in translation termination in response to the termination codons UAA, UAG and UGA (By similarity). Stimulates the activity of ETF1 (By similarity). Involved in regulation of mammalian cell growth (PubMed:2511002). Component of the transient SURF complex which recruits UPF1 to stalled ribosomes in the context of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons (PubMed:24486019).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC229318



Western blot validation of overexpression lysate (Cat# [LY432333]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229318 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).