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Product datasheet for MG204372

Gtf2h3 (NM_181410) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gtf2h3 (NM_181410) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gtf2h3
Synonyms:	34kDa; 5033417D07Rik; BTF2; BTF2 p34; C730029A10; D5Ertd679e; TFIIH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG204372 representing NM_181410
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCTGACGAAGATGAGTTGAACCTTCTGGTGATCATAGTTGACACCAACCCGATTTGGTGGGGAA
AGCAAGCATTAAAGGAATCTCAGTTTACTTTATCCAAATGCATGGATGCAGTGATGGTGCTGGCGAATTC
TCACCTGTTCATGAACCGCTCCAACCAGCTGGCTGTCATCGCCAGTCACATTCAGGAAAGCCGGCTCTTA
TACCCGGGGAAGAACGGTGGACTTGGAGACTTCTTCGGAGACCCTGGCAATGCGCTCCCCGACTGTAACC
CCTCTGGGAGTAAAGATGGGAAATACGAGCTGTTGACAGTTGCAAACGAGGTGATCGCTGAGGAGATCAA
GGATCTGATGACCAAGAGTGACATCAAGGGCCAGCATACGGAGACACTACTGGCAGGATCCCTGGCCAAA
GCTCTGTGCTACATTCACAGAGTGAACAAGGCAGTTAAAGATAATCAGGAGATGAAATCAAGGATTTTGG
TGATCAAGGCTGCAGAGGACAGCGCACTGCAGTACATGAACTTCATGAACGTCATCTTTGCTGCTCAGAA
GCAGAATATCCTCATCGACGCCTGCGTGCTGGACTCGGATTCAGGGCTCCTCCAGCAGGCTTGTGACATC
ACTGGGGGACTGTACCTGAAGGTGCCTCAGATGCCTTCTCTCCTGCAGTACTTACTGTGGGTTTTTCTTC
CGGACCAAGATCAGCGGTCTCAGCTAATCCTCCCACCCCCGATCCACGTGGACTACAGGGCTGCCTGCTT
CTGTCATCGCAGTCTCATTGAGATTGGCTATGTCTGCTCTGTGTGTCTGTCTATTTTCTGCAATTTCAGC
CCCATCTGCACCACGTGCGAGACAGCTTTTAAGATCTCCCTCCCTCCTGTGCTGAAGGCCAAGAAGAAGA
AACAGAAGGTGTCCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

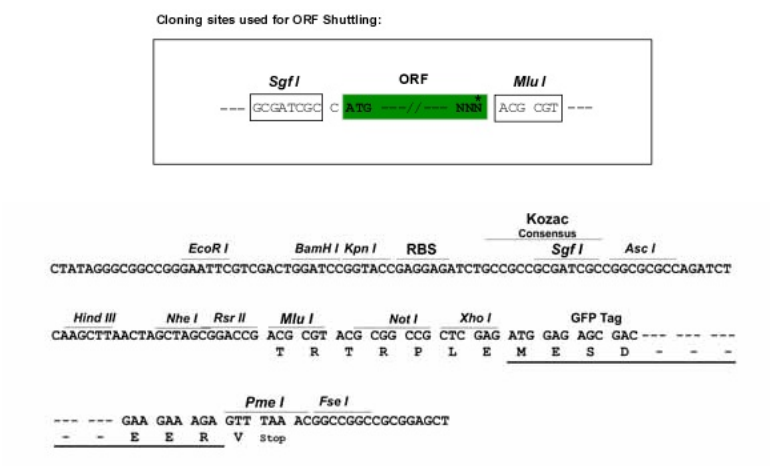
>MG204372 representing NM_181410
Red=Cloning site Green=Tags(s)

MAADEDELNLLVIIVDTNPIWWGKQALKESQFTLSKCMDAVMVLANSHLFMNRSNQLAVIASHIQESRLL
YPGKNGGLGDFFGDPGNALPDCNPSGSKDGKYELLTVANEVIAEEIKDLMTKSDIKGQHTETLLAGSLAK
ALCYIHRVNKAVKDNQEMKSRILVIKAAEDSALQYMNFMNVIFAAQKQNILIDACVLDSDSGLLQQACDI
TGGLYLKVPQMPSLLQYLLWVFLPDQDQRSQLILPPPIHVDYRAACFCHRSLIEIGYVCSVCLSIFCNFS
PICTTCETAFKISLPPVLKAKKKKQKVSL

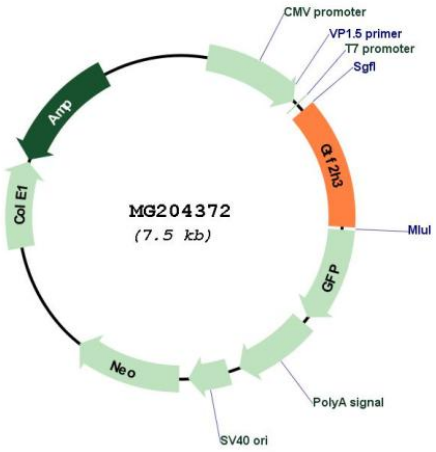
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_181410

ORF Size: 927 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_181410.3
RefSeq Size:	1815 bp
RefSeq ORF:	930 bp
Locus ID:	209357
UniProt ID:	Q8VD76
Cytogenetics:	5 63.67 cM
Gene Summary:	Component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription.[UniProtKB/Swiss-Prot Function]