

Product datasheet for **MR208340**

Gtf2h1 (NM_008186) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gtf2h1 (NM_008186) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gtf2h1
Synonyms:	62kDa; AW743425; AW822074; BTF2 p62; C77871; p62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208340 representing NM_008186
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAGAGAGAATTGCTTGGGCACCTGAAGGCAAAGACAGATTTACAATCAGCCATATGTATGCAGATA
 TTAATGCCAGAAAATCAGTCCAGAGGAAAAGCTAAAATACAACCTTCAGCTGGTCTGCATGCAGGGGA
 CACAACAACTTCCATTTTTCCAACGAAAGCACGGCAGTAAAAGAACGGGATGCAGTGAAGGACCTCCTT
 CAGCAGCTGCTGCCAAGTTCAAGCGAAAGCTAATAAAGAGCTGGAGGAGAAGAACAAGATGCTCCAAG
 AAGATCTGTTTTATTCCAACCTATAAAGACCTTGTGTGAGCCAAGTATCAGTGTGAGGAATCTG
 GGCCAATCGTTTAAATGTGAATGCAACAGATAGTTCTACATCCAGTCAACAAGCAGGATGTTGGTATTCT
 GCAGCATTTCTGGCTGATGTCCGGCCCCAACGGATGGCTGTAATGGTCTGAGATATAATTTAACTTCTG
 ATATCATTGAATCTATATTTAGGACCTATCCAGCAGTAAAAATGAAATATGCAGAACTGTACCACAA
 CATGACAGAAAAGGAGTTCTGGACACGCTTTTTCCAGTCCATTATTTTACAGGGACCGACTAAATACA
 GGATCGAAGGACCTCTTTCGAGAATGTGCCAAAATAGATGAGAAGGGATTAACAAACAATGGTTTCATTAG
 GAGTGAACCAATGCTAGATTTGACATCGTTGGAAGATAAGCCATTAGACGAGGGCTATGGCATTTC
 CTCTGTGCCATCTACTCCAATTCAAAATCCATAAAGGAGAATAGTAATGCTGCCATCATCAAAAGGTTT
 AACCACCACAGTGCCATGGTCTGGCTGCTGGTCTCAGGAAACAACAAGCACAAAATGGACAGAATGGTG
 AGCCCAGCAGCGTGGATGGGAATTCGGGGATACAGACTGCTTTCAGCCAGCAGTCAAAAGGGCAAAGTT
 GCAGGAGTCCATTGAATATGAAGACTTGGGAAACAACAATTCTGTGAAAACGATTGCACTGAATCTCAAG
 AAGTCAGACAGGTATTACCATGGTCTACTCCAATTCAGTCACTGCAGTATGCAACAAGTCAGGACATTA
 TTAACCTTTTTCAAAGTATTAGACAAGAAATGGAAGCTTACACACCCAAGTTAACTCAGTTCTCTCAAG
 CAGTGTGCTAGTAGCACCATCACAGCCCTGTACCTGGAGGAGCTCTTATGCAGGGAGGACACAGCAA
 GCCGTAACAGATGGTGCCAAACGATATTCAGTCTGAATTGAAACACTTGTATGTGGCTGTTGGGGAAC
 TTCTGCGGCATTTTTGGTCTTGTCTTCTGTTAATACACCATTCTAGAAGAAAAGGTAGTGAATGAA
 GAGTAATTTGGAACGGTTCCAAGTTACAAAGCTCTGCCATTCCAAGAAAAGATTCGGAGGCAGTATTTA
 AGCACAATCTGGTAAGTCACATAGAAGAGATGCTGCAGACAGCTACAACAAGCTCCACGCGTGGCAAT
 CCCGGCGCTGATGAAGAAGCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208340 representing NM_008186
 Red=Cloning site Green=Tags(s)

MAERIAWAPEGKDRFTISHMYADIKCQKISPEGKAKIQLQLVLHAGDTTNFHFSNESTAVKERDAVKDLL
 QQLLPKFKRKANKLEEKNRMLQEDPVLFQLYKDLVVSQVISAEEFWANRLNVNATDSSTSSHKQDVGIS
 AAFLADVRPQTDGCNGLRYNLTSDIIESIFRTYPAVKMKYAETVPHNMTEKEFWTRFFQSHYFHRDLNT
 GSKDLFAECAKIDEKGLKTMVSLGVKNPMLDLTSLDKPLDEGYGISSVPSTSNKSIKENSNAIIKRF
 NHHSAMVLAAGLRKQQAQNGQNGEPSSVDGNSGDTDCFQPAVKRAKLQESIEYEDLGNNSVKTIALNLK
 KSDRYHHGPTPIQSLQYATSQDIINSFQSIQEMEAYTPKLTQVLSASAASSTITALSPGGALMQGGTQQ
 AVNQMPNDIQSELKHLVYAVGELLRHFWSFCFPVNTPFLEEKVVKMKSNERFQVTKLCPFQEKIRRQYL
 STNLVSHIEEMLQTAYNKLHAWQSRRLMKKT

SGP**TRRRLEQKLI**SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_008186

ORF Size: 1641 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

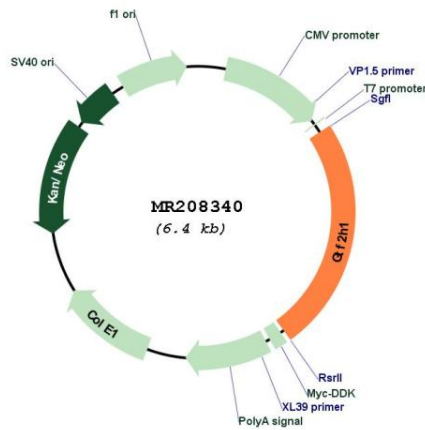
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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 Size: 2749 bp
RefSeq ORF: 1644 bp
Locus ID: 14884
UniProt ID: [Q9DBA9](#)
Cytogenetics: 7 B3
MW: 62.2 kDa

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]

Product images:



Circular map for MR208340