

Product datasheet for **MR230485**

Gtf2h1 (NM_001291075) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gtf2h1 (NM_001291075) 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:

>MR230485 representing NM_001291075
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCACCTTATAGCCATCATGGCGACTTCATCAGAAGAAGTGTGCTGATTGTGAAGAAGTTTCGTCAGA
 AGAAGCAGGATGGAGCACTGTACCTCATGGCAGAGAGAATTGCTTGGGCACCTGAAGGCCAAAGACAGATT
 TACAATCAGCCATATGTATGCAGATATTAATGCCAGAAAATCAGTCCAGAGGGAAAAAGCTAAAAATACAA
 CTTTCTAGCTGGTCTGCATGCAGGGGACACAACAACTTCCATTTTTTCAACGAAAGCACGGCAGTGAAAG
 AACGGGATGCAGTGAAGGACCTCTTCAGCAGCTGCTGCCAAGTTCAAGCGGAAAGCTAATAAAGAGCT
 GGAGGAGAAGAACAAGATGCTCCAAGAAGATCTGTTTTATTCCAACCTATAAAGACCTTGTGTGAGC
 CAAGTGATCAGTGTGAGGAATCTGGGCAATCGTTTAAATGTGAATGCAACAGATAGTTCTACATCCA
 GTCACAAGCAGGATGTTGGTATTTCTGCAGCATTCTGGCTGATGTCGGCCCCAACCGGATGGCTGTA
 TGGTCTGAGATATAATTTAACTTCTGATATCATTGAATCTATATTTAGGACCTATCCAGCAGTAAAAATG
 AAATATGCAGAACTGTACCACACAACATGACAGAAAAGGAGTTCTGGACACGCTTTTTCCAGTCCCAT
 ATTTTCACAGGGACCGACTAAATACAGGATCGAAGGACCTCTTTCGAGAATGTGCCAAAAATAGATGAGAA
 GGGATTAACAAATGTTTTCATTAGGAGTGAAAAACCAATGCTAGATTTGACATCGTTGGAAGATAAG
 CCATTAGACGAGGGCTATGGCATTTCCTCTGTGCCATCTACTTCCAATCCAAATCCATAAAGGAGAATA
 GTAATGCTGCCATCATCAAAGGTTTAAACCACCACAGTCCATGGTCTGGTCTGGTCTCAGGAAACA
 ACAAGCACAAAATGGACAGAATGGTGAAGCCAGCAGCGTGGATGGGAATCTGGGGATACAGACTGCTTT
 CAGCCAGCAGTCAAAGGGCAAAGTTGCAGGAGTCCATTGAATATGAAGACTTGGGAAACAACAATTCTG
 TGAACAGGATTCAGTGAATCTCAAGAAGTCAGACAGGATTACCATGGTCTACTCCAATTCAGTCACT
 GCAGTATGCAACAAGTCAGGACATTATACTCTTTTCAAAGTATTAGACAAGAAAATGGAAGCTTACACA
 CCCAAGTTAACTCAGTTCTCTCAAGCAGTGTGCTAGTAGCACCATCACAGCCCTGTCCCTGGAGGAG
 CTCTTATGCAGGGAGGGACAGCAAGCCGTAACCCAGATGGTGCCAAACGATATTAGTCTGAATTGAA
 ACACCTGTATGTGGTGTGGGAACTTCTGCGGCATTTTTGGTCTTGTCTTCTGTTAATACACCATT
 CTAGAAGAAAAGGTAGTGAAGAGTAAATTTGGAACGGTCCAAGTTACAAAGCTCTGCCATTCC
 AAGAAAAGATTCGAGGCAGTATTTAAGCACAAATCTGGTAAGTACATAGAAGAGATGCTGCAGACAGC
 CTACAACAAGCTCCACGCGTGGCAATCCCGCGCCTGATGAAGAAGACG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230485 representing NM_001291075
 Red=Cloning site Green=Tags(s)

MHLIAIMATSSEEVLLIVKKVRQKQDQALYLMAERIAWAPEGKDRFTISHMYADIKCQKISPEGKAKIQ
 LQLVLHAGDTTNFHFSNESTAVKERDAVKDLLQQLLPKFKRKANKELEENRMLQEDPVLFQLYKDLVVS
 QVISAEEFWANRLNVNATDSSTSSHKQDVGISAFLADVRPQTDGCNGLRYNLTSDIIESIFRTYPVKM
 KYAETVPHNMTEKEFWTRFFQSHYFHRDRLNTGSKDLFAECAKIDEKGLKTMVSLGVKNPMLDLTSLDK
 PLDEGYGISSVPSTSNKSIKENSNAAIKRFNHHSAMVLAAGLRKQQAQNGQNGEPSSVDGNSGDTDCF
 QPAVKRAKLQESIEYEDLGNNSVKTIALNLKSDRYHGPPIQSLQYATSQDIINSFQSIQEMEAYT
 PKLTQVLSASAASSTITALSPGGALMQGGTQQAVNQMPNDIQSELKHLVAVGELLRHFWSFCFPVNTPF
 LEEKVVKMKSNIERFQVTKLCPFQEKIRRQYLSTNLVSHIEEMLQTAYNKLHAWQSRRLMKKT

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_001291075

ORF Size: 1659 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_001291075.1](#), [NP_001278004.1](#)

RefSeq Size: 2716 bp

RefSeq ORF: 1662 bp

Locus ID: 14884

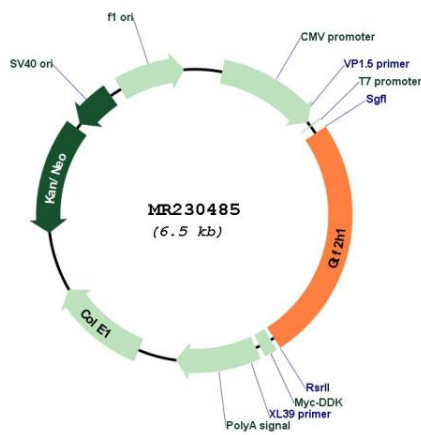
UniProt ID: [Q9DBA9](#)

Cytogenetics: 7 B3

MW: 62.9 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 MR230485