

## Product datasheet for RC209399

### GTF2H3 (NM\_001516) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GTF2H3 (NM_001516) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GTF2H3
Synonyms:	BTF2; P34; TFB4; TFIIH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209399 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTTTCAGACGAAGATGAATTGAATCTTCTGGTTATTGTAGTTGATGCCAACCAATTTGGTGGGGAA  
AGCAAGCATTAAAGGAATCTCAGTTCACTTTATCCAAATGCATAGATGCCGTGATGGTGTGGGAAATTC  
GCATTTATTCATGAATCGTTCACAACTTGTGTGATAGCAAGTCACATTCAAGAAAGCCGATTCTTA  
TATCCTGGAAAGAATGGCAGACTTGGAGACTTCTCGGAGACCCTGGCAACCCTCCTGAATTTAATCCCT  
CTGGGAGTAAAGATGAAAATACGAACCTTTAACCTCAGCAAATGAAGTTATTGTTGAAGAGATTAAGA  
TCTAATGACCAAAAGTGACATAAAGGGTCAACATACAGAACTTTGCTGGCAGGATCCCTGGCCAAAGCC  
CTTTGCTACATTCATAGAATGAACAAGGAAGTTAAAGACAATCAGGAAATGAAATCAAGGATATTGGTGA  
TTAAGGCTGCAGAAGACAGTGCCTTGCAGTATATGAACCTCATGAATGTCATCTTTCAGCACAGAAAACA  
GAATATTTTATTGATGCCTGTGTTTTAGACTCCGACTCAGGGCTCCTCCAACAGGCTTGTGACATCACG  
GGAGACTGTACCTGAAGGTGCCTCAGATGCCTTCTTCTGCAGTATTTGCTGTGGGTGTTTCTCCCG  
ATCAAGATCAGAGATCTCAGTTAATCCTCCCACCCCGGTTTCATGTTGACTACAGGGCTGCTTGCCTCTG  
TCATCGAAATCTCATTGAAATTTGGTTATGTCTGTTCTGTGTGTTGTCAATTTCTGCAATTTACAGCCCC  
ATTTGTACTACGTGCAGACAGCCTTTAAAATTTCTCTGCCTCCAGTGTCAAAGCCAAGAAAAAGAAAC  
TGAAAGTGTCTGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC209399 protein sequence  
Red=Cloning site Green=Tags(s)

MVSDDELNLLVIIVVDANPIWVGKQALKESQFTLSKCIDAVMVLGNSHLFMNRSNKLAVIASHIQESRFL  
 YPGKNGRLGDFFGDPGNPPEFNPSGSKDGKYELLTSANEVIVVEIKDLMTKSDIKGQHTETLLAGSLAKA  
 LCYIHRMNKEVKDNQEMKSRILVIKAAEDSALQYMNFMNVIFAAQKQNILIDACVLDSDSGLLQQACDIT  
 GGLYLKVPQMPSSLQYLLWVFLPDQDQRSQLILPPPVDYRAACFCHRNLEIGYVCSVCLSFICNFSP  
 ICTTCETAFKISLPPVLKAKKKLKVSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6356\\_h07.zip](https://cdn.origene.com/chromatograms/mk6356_h07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001516

**ORF Size:** 924 bp

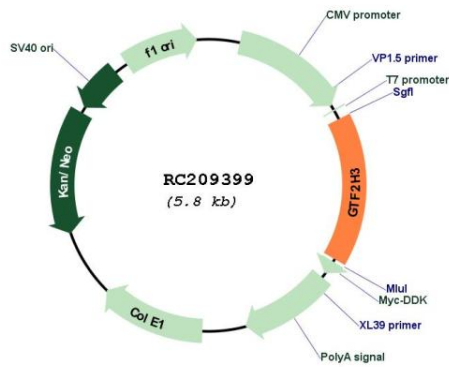
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

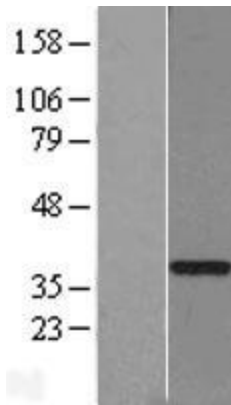
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001516.2</a>
<b>RefSeq Size:</b>	3434 bp
<b>RefSeq ORF:</b>	927 bp
<b>Locus ID:</b>	2967
<b>UniProt ID:</b>	<a href="#">Q13889</a>
<b>Cytogenetics:</b>	12q24.31
<b>Domains:</b>	Tfb4
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Basal transcription factors, Nucleotide excision repair
<b>MW:</b>	34.4 kDa
<b>Gene Summary:</b>	This gene encodes a member of the TFB4 family. The encoded protein is a subunit of the core-TFIID basal transcription factor and localizes to the nucleus. The encoded protein is involved in RNA transcription by RNA polymerase II and nucleotide excision repair and associates with the Cdk-activating kinase complex. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 14. [provided by RefSeq, Dec 2012]

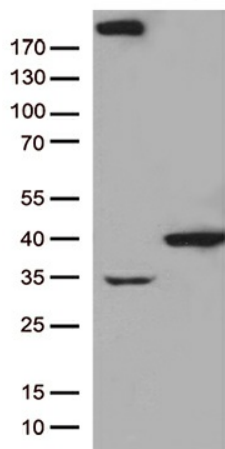
Product images:



Circular map for RC209399



Western blot validation of overexpression lysate (Cat# [LY419886]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209399 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GTF2H3 (Cat# RC209399, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GTF2H3 (Cat# [TA812725])(1:500). Positive lysates [LY419886] (100ug) and [LC419886] (20ug) can be purchased separately from OriGene.