

## Product datasheet for **RC218834**

### **GTF2IRD1 (NM\_005685) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GTF2IRD1 (NM_005685) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GTF2IRD1
Synonyms:	BEN; CREAM1; GTF3; hMusTRD1alpha1; MUSTRD1; RBAP2; WBS; WBSCR11; WBSCR12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC218834 representing NM\_005685  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCTTGTGGTAAGCGCTGTGACGTCCCCACCAACGGCTGCGGACCCGACCCTGGAACCTCCGCGT  
 TCACCCGCAAAGACGAGATCATCACCAGCCTCGTGTCTGCCTTAGACTCCATGTGCTCAGCGCTGTCCAA  
 ACTGAACGCCGAGGTGGCCTGTGTGCGCGTGCACGATGAGAGCGCCTTTGTGGTGGGCACAGAGAAGGGG  
 AGAATGTTCTGAATGCCCGGAAGGAGCTACAGTCAGACTTCTCAGTTCTGCCGAGGGCCCCCGTGGA  
 AGGATCCGGAGGCAGAGCACCCCAAGAAGTGCAGCGGGCGAGGGTGGAGGCCGTAGCCTCCCTCGGTC  
 CTCCTGGAACATGGCTCAGATGTGTACCTTCTGCGGAAGATGGTAGAGGAGGTGTTGATGTTCTTTAT  
 AGCGAGGCCCTGGGAAGGGCCAGTGTGGTCCACTGCCCTATGAGAGGCTGCTCAGGAGCCAGGGCTGC  
 TGGCCGTGACGGGGCTGCCCGAAGGCCCTGGCCTCCGAAGGCCAGCCGAGTATGACCCCAAGGCCCTCAT  
 GGCCATCTTGAACACAGCCACCGCATCCGCTTCAAGCTCAAGAGGCCACTTGAGGATGGCGGGCGGGAC  
 TCGAAGGCCCTGGTGGAGCTGAACGGTGTCTCCCTGATTCCCAAGGGGTACGGGACTGTGGCCTGCATG  
 GCCAGGCCCCCAAGGTGCCACCCAGGACCTGCCCCCAACCGCCACCTCCTCCTCATGGCCAGTTCCT  
 GTACAGCACGGCGCTCCCAACCCAGCCATTGAGAGCTCAAGCAGGAAGCACCTTCTGCCCCCTTGCC  
 CCCAGCGACCTGGGCCTGAGTCGGCCCATGCCAGAGCCCAAGGCCACCGGTGCCCAAGACTTCTCCGACT  
 GTTGTGGACAGAAAGCCACTGGGCTGGTGGGCCTCTCATCCAGAACGTCCATGCCTCCAAGCGCATTCT  
 CTTCTCCATCGTCCATGACAAGTCAGAGAAGTGGGACGCCTTCATAAAGGAAACCGAGGACATCAACACG  
 CTCCGGGAGTGTGTGCAGATCCTGTTTAAACAGCAGATATGCGGAAGCCCTGGGCCTGGACCACATGGTCC  
 CGGTGCCCTACCGGAAGATTGCCGTGACCCGGAGGCTGTGGAGATCGTGGGCATCCCGGACAAGATCCC  
 CTTCAAGCGCCCTGCACCTTATGGAGTCCCAAGCTGAAGCGGATCCTGGAGGAGCGCCATAGTATCCAC  
 TTCATCATTAAAGAGGATGTTTGTGAGCGAATTTTACAGGGAACAAGTTTACCAAGACACCACGAAGC  
 TGGAGCCAGCCAGCCCGCAGAGGACACCTCTGCAGAGTCTCTAGGGCCACCGTCTTGACCTTGTGG  
 GAATGCTCGGTACAGACAAGGGCAGCATGTCTGAAGACTGTGGGCCAGGAACCTCCGGGGAGCTGGGCGG  
 CTGAGGCCGATCAAAATTGAGCCAGAGGATCTGGACATCATTAGGTACCGTCCCAGACCCCTCGCCAA  
 CCTCTGAGGAAATGACAGACTCGATGCCTGGGCACCTGCCATCGGAGGATTCTGGTTATGGGATGGAGAT  
 GCTGACAGACAAAGTCTGAGTGAAGACCGCGGCCCGAGGAGAGGCCCTGGAGGACAGCCACGGTGAC  
 GTGATCCGGCCCTGCGGAAGCAGGTGGAGCTGCTCTTCAACACAGGATACGCCAAGGCCATTGGCATCT  
 CGGAGCCCGTCAAGGTGCCGTACTCCAAGTTTCTGATGCACCCGGAGGAGCTGTTTGTGGTGGGACTGCC  
 TGAAGGCATCTCCCTCCGCAGGCCAACTGCTTCGGGATCGCCAAGCTCCGGAAGATTCTGGAGGCCAGC  
 AACAGCATCCAGTTTGTATCAAGAGGCCCGAGCTGCTCACTGAGGGAGTCAAAGAGCCCATCATGGATA  
 GTCAAGAGAGGGATTCCGGGGACCCTCTGGTGGACGAGAGCCTGAAGAGACAGGGCTTTCAAGAAAATTA  
 TGACCGGAGGCTCTCACGGATCGACATCGCCAACACACTAAGGGAGCAGGTCCAGGACCTTTTCAATAAG  
 AAATACGGGGAAGCCTTGGGCATCAAGTACCCGGTCCAGTCCCTACAAGCGGATCAAGAGTAACCCCG  
 GCTCCGTGATCATCGAGGGCTGCCCCAGGAATCCCGTTCGAAAGCCCTGTACCTTCGGCTCCAGAA  
 CTTGGAGAGGATTCTTGTGTGGCTGACAAGATCAAGTTCACAGTCACCCAGGCCTTTCAAGGACTCAT  
 CCAAAGCCTGATGAAGATGACGCCAACAGACTCGGGGAGAAGGTGATCCTGCGGGAGCAGGTGAAGGAAC  
 TCTTCAACGAGAAATACGGTGAAGCCCTGGGCCTGAACCGGCCGGTGTGGTCCCTTATAAACTAATCCG  
 GGACAGCCAGACGCGTGGAGGTACGGGTCTGCCTGATGACATCCCCTTCCGGAACCCCAACAGTAC  
 GACATCCACCGGCTGGAGAAGATCCTGAAGGCCCGAGAGCATGTCCGCATGGTATCATTAAACAGCTCC  
 AACCTTTGCAGAAATCTGCAATGATGCCAAGGTGCCAGCCAAAGACAGCAGCATTCCCAAGCGCAAGAG  
 AAAGCGGGTCTCGGAAGGAAATCCGTCTCCTCTCCTCCTCGTCTTCTCCTCGTCTTCTCCTCGTCTA  
 AATCCCGGATTCAGTGGCATCGGCCAACAGATCTACTCGTCAATGGCCAATGTACATGGTGGACTATGCCGGCC  
 TGAACGTGCAGCTCCCGGACCTCTTAATTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC218834 representing NM\_005685  
 Red=Cloning site Green=Tags(s)

```
MALLGKRCDVPTNGCGPDRWNSAFTRKDEIITSLVSALDSMCSALSKLNAEVACVAVHDESFAVVGTEKG
RMFLNARKELQSDFLRFCRGGPPWKDPEAEHPKKVQRGEGGGRSLPRSSLEHGSDVYLLRKMVEEVFDVLY
SEALGRASVVPLPYERLLREPGLLAVQGLPEGLAFRRPAEYDPKALMAILEHSHRIRFKLRPLEDGGRD
SKALVELNGVSLIPKGSRDCLHGQAPKVPQDLPTATSSSMASFLYSTALPNHAIRELKQEAPSCPLA
PSDLGLSRMPPEPKATGAQDFSDCCGQKPTGPGGPLIQNVHASKRILFSIVHDKSEKWDFAIKETEDINT
LRECVQILFNSRYAEALGLDHMVVPPYRKIACDPEAVEIVGIPDKIPFKRPCTYGVPKLKRILEERHSIH
FIIKRMFDERIFTGNKFTKDTTKLEPASPPEDTSAEVSRA TVLDLAGNARSDKGSMSSEDCGPGTSGELGG
LRPIKIEPEDLDIIQVTVPPSPPTSEEMTDSMPGHLPESDSGYGMEMLTDKGLSEDPARPEERPVEDSHGD
VIRPLRKQVELLFNTRYAKAIGISEPVKVPYSKFLMHPEELFVVGLEPISLRPNCFGI AKLRKILEAS
NSIQFVIKRPPELLTEGVKEPIMDSQERDSGDPLVDESLKRQGFQENYDARLSRIDIANLREQVQDLFNK
KYGEALGIKYPVQVPYKRIKSNPGSVIIIEGLPPGIPFRKPTFGSQNLERILAVADKIKFTVTRPFQGLI
PKPDEDDANRLGEKVILREQVKELFNEKYGEALGLNRPVLPYKLI RDSPDAVEVTGLPDDIPFRNPNTY
DIHRLEKILKAREHVRMVIINLQPF AEICNDAKVP AKDSSIPKRKRKR VSEGNSVSSSSSSSSSSSNP
DSVASANQISLVQWPMYVDYAGLNVQLPGPLNY
```

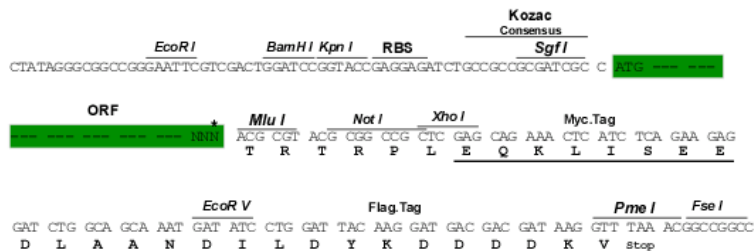
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6594\\_a06.zip](https://cdn.origene.com/chromatograms/mk6594_a06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



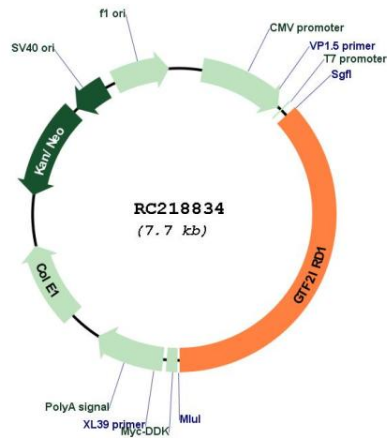
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_005685

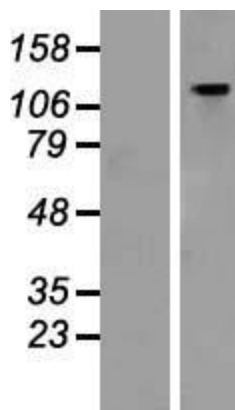
**ORF Size:** 2832 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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_005685.4</a>
<b>RefSeq Size:</b>	3078 bp
<b>RefSeq ORF:</b>	2835 bp
<b>Locus ID:</b>	9569
<b>UniProt ID:</b>	<a href="#">Q9UHL9</a>
<b>Cytogenetics:</b>	7q11.23
<b>Domains:</b>	GTF2I
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Basal transcription factors
<b>MW:</b>	104.5 kDa
<b>Gene Summary:</b>	The protein encoded by this gene contains five GTF2I-like repeats and each repeat possesses a potential helix-loop-helix (HLH) motif. It may have the ability to interact with other HLH-proteins and function as a transcription factor or as a positive transcriptional regulator under the control of Retinoblastoma protein. This gene plays a role in craniofacial and cognitive development and mutations have been associated with Williams-Beuren syndrome, a multisystem developmental disorder caused by deletion of multiple genes at 7q11.23. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2010]

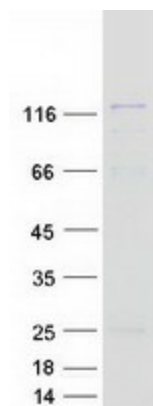
Product images:



Circular map for RC218834



Western blot validation of overexpression lysate (Cat# [LY417136]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218834 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GTF2IRD1 protein (Cat# [TP318834]). The protein was produced from HEK293T cells transfected with GTF2IRD1 cDNA clone (Cat# RC218834) using MegaTran 2.0 (Cat# [TT210002]).