

Product datasheet for **RG218834**

GTF2IRD1 (NM_005685) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GTF2IRD1 (NM_005685) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GTF2IRD1
Synonyms:	BEN; CREAM1; GTF3; hMusTRD1alpha1; MUSTRD1; RBAP2; WBS; WBSCR11; WBSCR12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG218834 representing NM_005685
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCTTGTGGTAAGCGCTGTGACGTCCCCACCAACGGCTGCGGACCCGACCCTGGAACCTCCGCGT
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 ACTGAACGCCGAGGTGGCCTGTGTGCGCGTGCACGATGAGAGCGCCTTTGTGGTGGGCACAGAGAAGGGG
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 AGCGAGGCCCTGGGAAGGGCCAGTGTGGTCCACTGCCCTATGAGAGGCTGCTCAGGAGCCAGGGCTGC
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 GATTCAAGTGGCATCGGCCAACAGATCTACTCGTCAATGGCCAATGTACATGGTGGACTATGCCGGCC
 TGAACGTGCAGCTCCCGGACCTCTTAATTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG218834 representing NM_005685
 Red=Cloning site Green=Tags(s)

MALLGKRCDVPTNGCGPDRWNSAFTRKDEIITSLVSALDSMCSALSKLNAEVACVAVHDESAFVVGTEKG
 RMFLNARKELQSDFLRFCRGPPWKDPEAEHPKKVQRGEGGGRSLPRSSLEHGSDVYLLRKMVEEVDVLY
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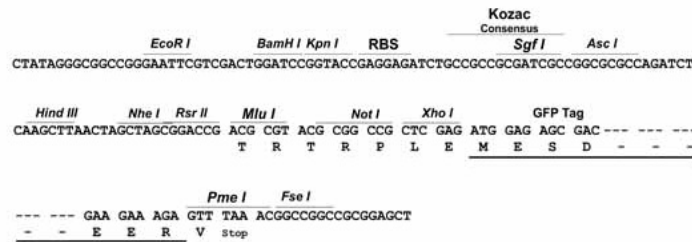
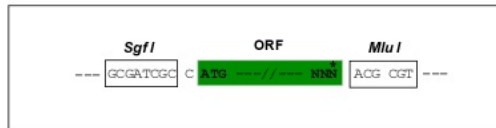
TRTRPLE - GFP Tag - V

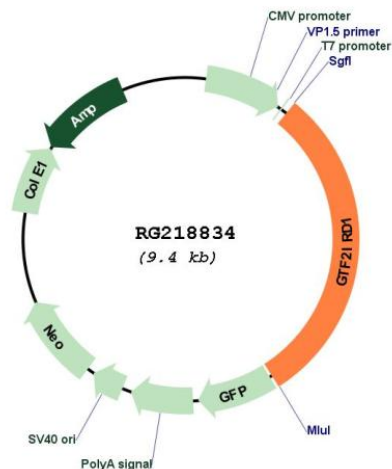
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_005685

ORF Size: 2832 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_005685.2](#), [NP_005676.2](#)

RefSeq Size: 3078 bp

RefSeq ORF: 2835 bp

Locus ID: 9569

UniProt ID: [Q9UHL9](#)

Cytogenetics: 7q11.23

Domains:	GTF2I
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Basal transcription factors
Gene Summary:	<p>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]</p>