

Product datasheet for RC204607

TFIIB (GTF2B) (NM_001514) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TFIIB (GTF2B) (NM_001514) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TFIIB
Synonyms:	TF2B; TFIIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204607 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTCTACCAGCCGTTGGATGCTCTTCCAAGAGTCACATGTCCAAACCATCCAGATGCGATTTAG
TGGAGGACTACAGAGCCGGTGATATGATCTGCTCCTGAATGTGGCTTGGTTGTAGGTGACCGGTTATTGA
TGTGGGATCTGAATGGCGAACTTTCAGCAATGACAAAGCAACAAAAGATCCATCTCGAGTTGGAGATTCT
CAGAATCCTCTTCTGAGTGATGGAGATTTGTCTACCATGATTGGCAAGGGCACAGGAGCTGCAAGTTTTG
ACGAATTTGGCAATTCTAAGTACCAGAATCGGAGAACAATGAGCAGTTCTGATCGGGCAATGATGAATGC
ATTCAAAGAAATCACTACCATGGCAGACAGAATCAATCTACCTCGAAATATAGTTGATCGAACAAATAAT
TTATTCAGCAAGTATATGAACAGAAGAGCCTGAAGGGAAGAGCTAATGATGCTATAGCTTCTGCTTGTCT
TCTATATTGCCTGTAGACAAGAAGGGGTTCTAGGACATTTAAAGAAATATGTGCCGTATCACGAATTTCT
TAAGAAAGAAATTGGTCGGTGTTTTAACTTATTTGAAAGCGCTAGAAACCAAGTGTGGATTTGATTACA
ACTGGGGACTTCATGTCCAGTTCTGTTCCAACCTTTGTCTTCTAAACAAGTACAGATGGCAGCTACAC
ATATAGCCCGTAAAGCTGTGGAATTGGACTTGGTTCTGGGAGGAGCCCCATCTGTGGCAGCGGCAGC
TATTTACATGGCCTCACAGGCATCAGCTGAAAAGAGGACCCAAAAAGAAATTGGAGATATTGCTGGTGTT
GCTGATGTTACAATCAGACAGTCTATAGACTGATCTATCCTCGAGCCCCAGATCTGTTTCTACAGACT
TCAAATTTGACACCCCAAGTGGACAACTACCACAGCTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204607 protein sequence
Red=Cloning site Green=Tags(s)

MASTSRLDALPRVTCPNHPDAILVEDYRAGDMICPECGLVVGDRVIDVGSEWRTFSNDKATKDPSRVGDS
 QNPLLSDGDLSTMIGKGTGAASFDEFNGSKYQNRRTMSSSDRAMNAFKEITTMADRINLPRNIVDRNTN
 LFKQVYEQKSLKGRANDAIASACLYIACRQEGVPRTFKEICAVSRISKKEIGRCFKLILKALETSDVLIT
 TGDFMSRFC SNLCLPKQVQMAATHIARKAVELDLVPGRSPI SVAAAAIYMASQASAEKRTQKEIGDIAGV
 ADVTIRQSYRLIYPRAPDLFPTDFKFDTPVDKLPQL

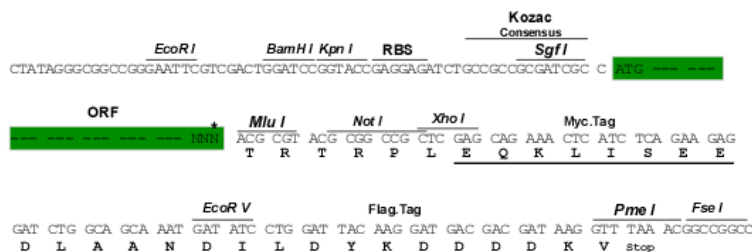
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6069_c12.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_001514

ORF Size: 948 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_001514.5](#)

RefSeq Size: 1651 bp

RefSeq ORF: 951 bp

Locus ID: 2959

UniProt ID: [Q00403](#)

Cytogenetics: 1p22.2

Domains: transcript_fac2, CYCLIN

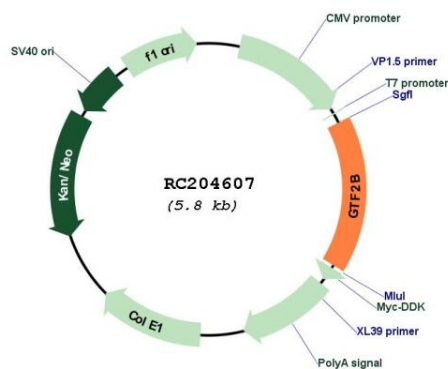
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Basal transcription factors

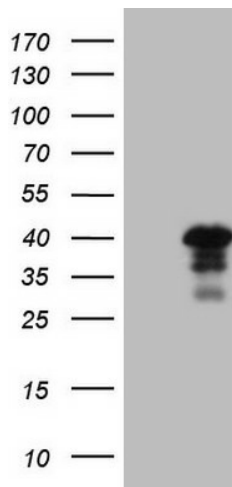
MW: 34.8 kDa

Gene Summary: This gene encodes the general transcription factor IIB, one of the ubiquitous factors required for transcription initiation by RNA polymerase II. The protein localizes to the nucleus where it forms a complex (the DAB complex) with transcription factors IID and IIA. Transcription factor IIB serves as a bridge between IID, the factor which initially recognizes the promoter sequence, and RNA polymerase II. [provided by RefSeq, Jul 2008]

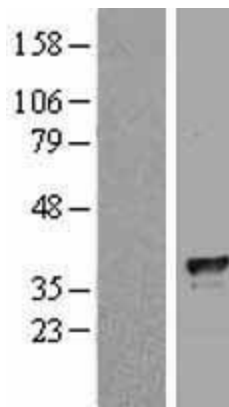
Product images:



Circular map for RC204607



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GTF2B (Cat# RC204607, 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-GTF2B (Cat# [TA808602])(1:2000). Positive lysates [LY400582] (100ug) and [LC400582] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400582]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204607 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GTF2B protein (Cat# [TP304607]). The protein was produced from HEK293T cells transfected with GTF2B cDNA clone (Cat# RC204607) using MegaTran 2.0 (Cat# [TT210002]).