

Product datasheet for **RG200950**

KBTBD6 (NM_152903) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KBTBD6 (NM_152903) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KBTBD6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG200950 representing NM_152903
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGCAGTCCCGGAAGACGCCCCGCGCTCTCGCCGCTAGCCAGTCCCCGTGGTGGGAAGCGGCCAAGA
 AGATTCACAAACCCACAGTTTCGGCCTTTTTCACGGGTCCAGAGGAATTAAGGACACGGCCATTCTGC
 AGCCCTGCTGGCAGCTCAAGTCTTCTACGATGCGCGGCTGCTGTGTATGTGACCATCGAGGTGGTG
 ACGCCTGGCAGCGGGCTGGCACGGGTCGCTGTTCCCTGCAACCGCAATGTGTGGCCGCGCATGTC
 CCTACTTCAAGAGCATGTTACAGGTGGCATGTACGAGAGCCAGCAGGCCAGCGTGACCATGCACGATGT
 GGACGCCGAGTCTTCGAGGTGTTGGTCGACTACTGCTACACGGGTCGTGTCTCTCAGTGAGGCCAAC
 GTGGAGCGCTGTACGCGGCTCCGACATGCTACAGCTGGAATATGTGCGGAAGCCTGTGCCTCCTTCT
 TAGCCCGACGTCTTGACCTGACCAACTGCACCGCCATCCTCAAGTTTGAGATGCCTTTGGCCATCGCAA
 GCTGCGATCCCGAGGCCAGTCTATATAGCTCAGAACTCAAGCAACTCAGCCACATGGGTTCAATTCCG
 GAGGAGACTCTAGCAGATCTGACCTGGCCAGCTGCTGGCTGTCTGCGCTTGGATAGTCTGGAGGTGG
 AGAGTGAGCAGACAGTGTGCCATGTGGCAGTGCAGTGGCTGGAGGCTGCTCCCAAAGAGCGGGTCCAG
 TGCTGCAGAACTTCAAGTGCCTGCGCTGGATGCACTTCACTGAAGAAGATCAGGACTACTTAGAAGGG
 CTGCTGACCAAGCCCATCGTGAAGAAGTACTGCCTGGACGTTATTGAAGGGGCCCTGCAGATGCGTATG
 GTGACCTGTTGTACAAGTCTCTGGTGCCAGTGCCAAACAGCAGCAGCAGTAGCAGCAGCAACTCTCT
 TGTATCTGCAGCAGAAAAACCCAGAGACTGGGTATGTGTGCAAGGAGATGGTGATCTTCTTTGGA
 CACCCAGAGATCCCTTCTCTGCTGTGATCCATACTCGGGGACCTTTACAAAGTGCCGTCACCTTTGA
 CCTGTCTGGCTCACACTAGGACTGTCACCACTCTAGCTGTCTGTATCTCTCTGACCATGACATCTATCT
 AGCTGCTCAGCCAGGACAGACCTCTGGGTGTATAAACCAGCTCAGAAATAGTTGGCAGCAACTTGCAGAT
 CGCTTGCTGTGCTGAGGGCATGGATGTGGCATATCTCAATGGCTATATCTACATTTTGGGGGGCGAG
 ACCCTATTACTGGAGTTAAGTTGAAGGAAGTGAATGCTACAATGTTAAGAGAAACCAAGTGGGCATTGGT
 GGCTCCACTGCCCCATTCTTTTTATCCTTTGACCTAATGGTAATTCGAGACTATCTCTATGCTCTCAAC
 AGTAAGCGCATGTTCTGTTATGATCCTAGCCACAATATGTGGCTGAAGTGCCTTCTCTGAAGCGCAATG
 ACTTTAGGAAGCCTGCGTCTTCAATGAGGAGATCTATTGTATCTGTGATATCCAGTCATGAAGGTCTA
 CAACCCAGTTAGGGCAGAAATGGAGGCAATGAATAATATCCCTTGGTCTCAGAGACCAACAACACAGA
 ATTATCAAGCATGGCCAAAAATTGTTGCTCATCACCTCTCGCACCCACAGTGAAAAAGAACCGGGTGA
 CTGTGTATGAATATGATATTAGGGGAGACCAATGGATTAAATATAGGTACCACATTAGGCCTCTTGCAATT
 TGATTCTAACTTTTTTGCCTCTCTGCTCGTGTATCTTCTGCTTGAACCTGGTCAGAGTTTCCTC
 ACTGAAGAAGAAGAAATACCAAGTGAGTCTAGCACTGAATGGGACTTAGGTGGATTAGTGAGCCAGACT
 CTGAGTCAGGAAGTTCAAGTTCTTTCTGATGATGATTTTTGGTGCGTGTAGCGCCTCAG

ACGCGTACGCGGGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG200950 representing NM_152903
 Red=Cloning site Green=Tags(s)

MQSREDAPRSRLASPRGGKRPKKIHKPTVSAFFTGPPEELKDTAHSALLAQLKSFYDARLLCDVTIEVV
 TPGSGPGTGRLFCNRLVLAACPYFKSMFTGGMYESQQASVTMHDVDAESFEVLVDYCYTGRVSLSEAN
 VERLYAASDMLQLEYVREACASFLARRDLTNCTAILKFADAFGHRKLSQAQSYIAQNFKQLSHMGSIR
 EETLADLTLAQLLAVLRDLSLDVESEQTVCHVAVQWLEAAPKERGPSAAEVFKCVRWMHFTEEDQDYLEG
 LLTKPIVKKYCLDVIEGALQMRGYDLLYKSLVPVPNSSSSSSSSNSLVSAENPPQRLGMAKEMVIFFG
 HPRDPFLCCDPYSGDLKVPSPLTCLAHTRTVTTLAVCISPDHDIYLAAPRTDLWVYKPAQNSWQQLAD
 RLLCREGMDVAYLNGYIYLGGRPITGVKLKEVECYNVKRNQWALVAPLPHSFLSFDLMVIRDYLYALN
 SKRMFCYDP SHNMWLKCVSLKRNDQEACVFNEEICYICDIPVMKYVNPVRAEWRQMNIPLVSETNNYR
 IIKHGQKLLLITSRTQWKNNRVTVYEYDIRGDQWINIGTTLGLLQFDSNFFCLSARVYPSCLEPGQSFL
 TEEEEIPSESTEWDLGGFSEPDSESGSSSLSDDDFWVRVAPQ

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_152903

ORF Size: 2022 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_152903.4](#), [NP_690867.3](#)

RefSeq Size: 5228 bp

RefSeq ORF: 2025 bp

Locus ID: 89890

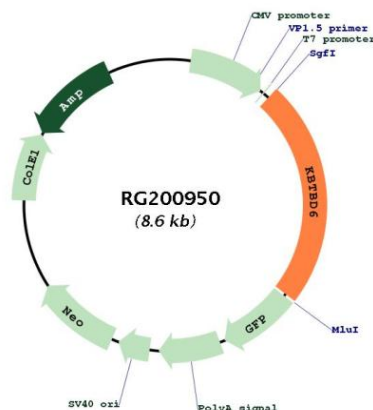
UniProt ID: [Q86V97](#)

Cytogenetics: 13q14.11

Domains: BTB, Kelch

Gene Summary: As part of the CUL3(KBTBD6/7) E3 ubiquitin ligase complex functions as a substrate adapter for the RAC1 guanine exchange factor (GEF) TIAM1, mediating its 'Lys-48' ubiquitination and proteasomal degradation (PubMed:25684205). By controlling this ubiquitination, regulates RAC1 signal transduction and downstream biological processes including the organization of the cytoskeleton, cell migration and cell proliferation (PubMed:25684205). Ubiquitination of TIAM1 requires the membrane-associated protein GABARAP which may restrict locally the activity of the complex (PubMed:25684205).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG200950