

Product datasheet for **RC226958**

TBC1D7 (NM_001143966) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TBC1D7 (NM_001143966) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TBC1D7
Synonyms: MGCPH; PIG51; TBC7
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC226958 representing NM_001143966
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACTGAGGACTCTCAGAGAACTTTCGTTTCAGTATATTATGAGAAAGTGGGGTTTCGTGGAGTTGAAG
 AAAAGAAATCATTAGAAATTCCTCTAAAAGATGACCGTCTGGGAATCTGCCTCCACACCACGAGTCCCA
 TGCCAAGGTGATGATGTATCGTAAGGAGCAGTACTTGGATGTCTTCATGCCCTGAAAGTCGTTTCGCTTT
 GTTAGTGATGCCACACCTCAGGCTGAAGTCTATCTCCGCATGTATCAGCTGGAGTCTGGGAAGTTACCTC
 GAAGTCCCTCTTTCCACTGGAGCCAGATGATGAAGTGTTCCTGCCATAGCTAAAGCCATGGAGGAAAT
 GGTGGAAGATAGTGTGCGACTGTTACTGGATCACCCGACGCTTTGTGAACCAATTAATACCAAGTACCGG
 GATTCCTTGCCCCAGTTGCCAAAAGCGTTTGAACAATACTTGAATCTGGAAGATGGCAGACTGCTGACTC
 ATCTGAGGATGTGTTCCGCGCGCCCAAACCTTCTTATGATCTCTGGTTCAAGAGGTGCTTTGCGGGATG
 TTTGCCTGAATCCAGTTTACAGAGGGTTTGGGATAAAGTTGTGAGTGGATCCTGTAAGATCCTAGTTTTT
 GTAGCTGTCGAAATTTTAACTTTAAAATAAAGTTATGGCACTGAACAGTGCAGAGAAGATAACAA
 AGTTTCTGGAAAATATCCCCAGGACAGCTCAGACGCGATCGTGAGCAAGGCCATTGACTTGTGGCACA
 AACTGTGGGACCCCGTCCATTCAAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC226958 representing NM_001143966
Red=Cloning site Green=Tags(s)

MTEDSQRNFRSVYYEKVGFGRGVEEKKSLIILLKDDRLGILPPHHESHAKVMMYRKEQYLDVLHALKVVRF
VSDATPQAEVYL RMYQLESGKLPRSPSPFLEPDDEVFLAIKAMEEMVEDSVDCYWITRRFVNQLNTKYR
DSLPLQLPKAFEQYLNLEDGRLLTHLRMCSAAPKLPYDLWFKRCFAGCLPESSLQRVWVKVVS GSCKILVF
VAVEILLTFKIKVMALNSAEKITKFL ENIPQDSSDAIVSKAIDLWHKHC GTPVHSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1495_g06.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_001143966

ORF Size: 798 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_001143966.3](#), [NP_001137438.1](#)

RefSeq ORF: 801 bp

Locus ID: 51256

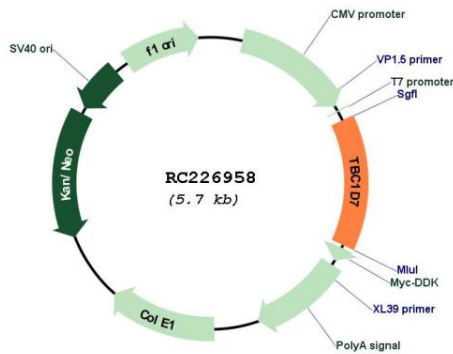
UniProt ID: [Q9P0N9](#)

Cytogenetics: 6p24.1

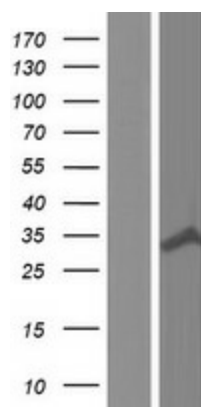
MW: 30.6 kDa

Gene Summary: This gene encodes a member of the TBC-domain containing protein family. The encoded protein functions as a subunit of the tuberous sclerosis TSC1-TSC2 complex which plays a role in the regulation of cellular growth and differentiation. Mutations in this gene have been associated with autosomal recessive megalencephaly. Alternative splicing results in multiple transcript variants. Naturally occurring readthrough transcription occurs between this locus and downstream LOC100130357. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC226958



Western blot validation of overexpression lysate (Cat# [LY428429]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226958 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).