

## Product datasheet for **RC230003**

### TCN2 (NM\_001184726) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TCN2 (NM_001184726) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TCN2
Synonyms:	D22S676; D22S750; II; TC; TC-2; TC2; TC II; TCII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC230003 representing NM_001184726 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGAGGCACCTTGGGGCCTTCTCTTCTTCTGGGGTCTGGGGCCCTCACTGAGATGTGTGAAATAC  
CAGAGATGGACAGCCATCTGGTAGAGAAGTTGGGCCAGCACCTTACCTTGGATGGACCGGCTTCCCT  
GGAGCACTGAACCCAGCATCTATGTGGGCTACGCCTCTCCAGTCTGCAGGCTGGACCAAGGAAGAC  
CTCTACCTGCACAGCCTCAAGCTTGGTTACCAGCAGTGCCTCCTAGGGTCTGCCTCAGCGAGGATGACG  
GTGACTGCCAGGCAAGCCTTCCATGGGCCAGCTGGCCCTCTACCTGCTCGCTCTCAGAGCCAAGTGGCA  
TGATCACAAAGGGCCACCCACACTAGCTACTACCAAGTATGGCCTGGGCATTCTGGCCCTGTGTCTCCAC  
CAGAAGCGGGTCCATGACAGCGTGGTGGACAACTTCTGTATGCTGTGGAACCTTCCACCAGGGCCACC  
ATTCTGTGGACACAGCAGCCATGGCAGGCTTGGCATTACCTGTCTGAAGCGCTCAAACCTCAACCTGG  
TCGGAGACAACGGATCACCATGGCCATCAGAACAGTGCAGAGGAGATCTGAAGGCCAGACCCCGAG  
GGCCACTTGGGAATGTCTACAGCACCCATTGGCATTACAGTTCCTCATGACTTCCCCATGCGTGGGG  
CAGAACTGGGAACAGCATGTCTCAAGCGAGGGTTGCTTGTGGCCAGTCTGCAGGATGGAGCCTTCCA  
GAATGCTCTCATGATTTCCAGCTGTGCCGTTCTGAACCACAAGACCTACATTGATCTGATCTTCCCA  
GACTGTCTGGCACCAGAGTCATGTTGGAACAGCTGCTGAGACCATTCTCAGACCCAAGAGATCATCA  
GTGTACAGCTGCAGGTGCTTAGTCTCTTGCCGCGTACAGACAGTCCATCTCTGTTCTGGCCGGGTCCAC  
CGTGAAGATGTCTGAAGAAGGCCATGAGTTAGGAGGATTCACATATGAAACACAGGCCCTCCTTGTC  
GGCCCTACTTAACCTCCGTGATGGGAAAGCGGCCGGAGAAAGGGAGTTCTGGCAGCTTCTCCGAGACC  
CCAACACCCCACTGTTGCAAGGTATTGCTGACTACAGACCAAGGATGGAGAAACCATTGAGCTGAGGCT  
GGTTAGCTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC230003 representing NM\_001184726  
Red=Cloning site Green=Tags(s)

MRHLGAFLLGVLGALTEMCEIPEMDSHLVEKLGQHLLPMDRLSLEHLNPSIYVGLRLLSSLQAGTKED  
 LYHLHSLKLGYYQCLLGSFAFSEDDGDCQGKPSMGQLALYLLALRANWHDHKGHPHTSYYYQYGLGILALCLH  
 QKRVDHDSVVDKLLYAVEPFHQGHHSVDTAAMAGLAFTCLKRSNFPGRQRITMAIRTVREEILKAQTPE  
 GHFGNVYSTPLALQFLMTSPMRGAELGTACLKARVALLASLQDGAFQNALMISQLLPVLNHKTYIDLIFP  
 DCLAPRVMLEPAAETIPQTQEIIISVTLQVLSLLPPYRQSI SVLAGSTVEDVLLKKAHELGGFTYETQASLS  
 GPYLTSVMGKAAGEREFWQLLRDPNTPLLQGIADYRPKDGETIELRLVSW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3973\\_a01.zip](https://cdn.origene.com/chromatograms/mg3973_a01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_001184726

**ORF Size:** 1200 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\\_001184726.1](#), [NP\\_001171655.1](#)

**RefSeq ORF:** 1203 bp

**Locus ID:** 6948

**UniProt ID:** [P20062](#)

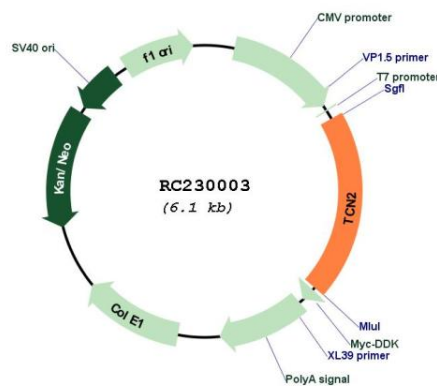
**Cytogenetics:** 22q12.2

**Protein Families:** Druggable Genome, Secreted Protein

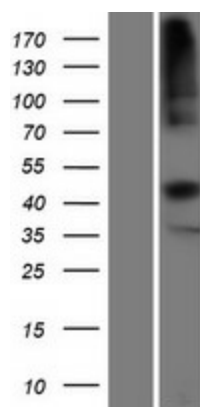
**MW:** 44.9 kDa

**Gene Summary:** This gene encodes a member of the vitamin B12-binding protein family. This family of proteins, alternatively referred to as R binders, is expressed in various tissues and secretions. This plasma protein binds cobalamin and mediates the transport of cobalamin into cells. This protein and other mammalian cobalamin-binding proteins, such as transcobalamin I and gastric intrinsic factor, may have evolved by duplication of a common ancestral gene. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

### Product images:



Circular map for RC230003



Western blot validation of overexpression lysate (Cat# [LY433003]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230003 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).