

## Product datasheet for **RC203377**

### **TOE1 (NM\_025077) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TOE1 (NM_025077) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TOE1
Synonyms:	hCaf1z; PCH7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC203377 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCGCCGACAGTGACGATGGCGCAGTTTCAGCTCCCGCAGCTTCCGACGGTGGTGTGACAAAAGCA  
 CAACATCTGGGGAGGAGCTAGTAGTCCAGTTCCTCGTAGTGGATGTGCAAAGCAACAACCTCAAGGAGAT  
 GTGGCCATCCCTCCTGCTAGCCATAAAGACAGCTAATTCGTTGGCTGTGGACACGGAGCTGAGTGGGCTT  
 GGGGACAGGAAGAGTTTGTGAACAGTGCATTGAGGAACGTTACAAGGCCGTGTGTCATGCTGCCAGGA  
 CCCGTTCTATCCTTTCCCTGGGCTCGCTGCTTCAAGCGGCAGCCAGACAAGGGTGAACATTCCTATCT  
 GGCTCAAGTGTTCAATCTCACTCTGCTGTGATGGAGGAGTATGTCATAGAACCAAAGTCTGTGCAGTTC  
 CTGATACAGCATGGCTTCAACTCAACCAGCAGTATGCCAAGGCATCCCCTACCATAAGGGCAATGACA  
 AGGGTGTAGAGCCAGAGCCAGTACGACGACCTATTCCTGGAGCTAATCCGAGCCCGCCGCCCT  
 GGTGCTACACAATGGCCTTATAGACTTGGTGTCTGTACCAGAACTTCTATGCACACCTCCCTGAGAGT  
 CTGGGAACCTTACCGCTGACCTGTGTGAGATGTTCCAGCAGGCATTTATGACACCAAATATGCTGCTG  
 AGTTTCATGCCGTTTTCGTTGGCCTCCTACTTAGAATATGCCTTCCGAAATGTGAACGGGAAATGGGAA  
 GCAGCGGGCAGCTGGCAGCCACACCTTACCCTGGAGTTCGCAACTATCCTTCCAGCATGAGGGACCAT  
 ATTGATTACCGCTGTGCTGCCCCAGCAACCCACCTCCTATCCCACCAGCATCTGTGACAACCTTCT  
 CGGCTTATGGCTGGTGGCCCTGGGACCACAGTGTCTCAGTCTCAGCATATTGACCTTATCATTGACAC  
 TGATGAGGCTGCGGCAGAGGACAAGCGGCGACGGCAGCAGTAGGAAAAACGGAAGAGGGCTTTATTG  
 AACCTACCGGGGACACAGACCTCTGGGGAAGCTAAGGATGGTCTCCCAAGAAGCAGGCTGTGGGGATA  
 GCATCAAGCCTGAAGAAACCGAGCAGGAGTGGCTGCCGATGAACTAGGAACCTGCCTCACTCCAAGCA  
 AGGCAACAAAAATGACTTAGAGATGGGGATTAAGGCAGCAAGGCCTGAAATAGCTGATAGAGCTACCTCA  
 GAAGTGCCAGGGAGCCAAGCCAGTCTAACCAGTGCCTGGGGATGGATTGCACCGGGCTGGTTTTGATG  
 CCTTTATGACAGGTTATGTGATGGCCTATGTGGAAGTGAAGCCAGGGACCGCAGCCCTGCAGCTCTGGACC  
 CTGGCTCCCTGAATGCCACAATAAGGTATATTTGAGTGGCAAAGCTGTACCCCTCACAGTGGCCAAGAGC  
 CAGTTCTCTGTTCTCCAAAGCCACAATCAGAAGATGAAGCTCACTTGGGGCAGTAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC203377 protein sequence  
 Red=Cloning site Green=Tags(s)

MAADSDDGAVSAPAASDGGVSKSTTSGEELVVQVPVVDVQSNFKEMWPSLLLAIKTANFVAVDTELSGL  
 GDRKSLLNQCIERYKAVCHAARTRSILSLGLACFKRQDPKGEHSYLAQVFNLTLLCMEYVIEPKSVQF  
 LIQHGFNFNQYQGIPIYHKGNKGDQESQSVRTLFLLELIRARRPLVLHNLIDLVFLYQNFYAHLPES  
 LGTFTADLCMFPAIYDTKYAAEFHARFVASYLEYAFRCERENKQRAAGSPHLEFCNYPSSMRDH  
 IDYRCCLPPATHRPHPTSIDNFSAYGWCPQCPQSHDIDLIIIDTDEAAAEDKRRRRRRREKRKRALL  
 NLPQTSGEAKDGPVKQVCGDSIKPEETEQEVAADETRNLPHSKQGNKNDLEMGIKARPEIADRATS  
 EVPQSASPNPVPDGLHRAGFDAMTYVMAYVEVSQGPQPCSSGPWLPECHNKVYLSGKAVPLTVAKS  
 QFSRSSKAHNQMKMLTWGSS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6057\\_g07.zip](https://cdn.origene.com/chromatograms/mk6057_g07.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_025077

**ORF Size:** 1530 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\\_025077.4](#)

**RefSeq Size:** 2408 bp

**RefSeq ORF:** 1533 bp

**Locus ID:** 114034

**UniProt ID:** [Q96GM8](#)

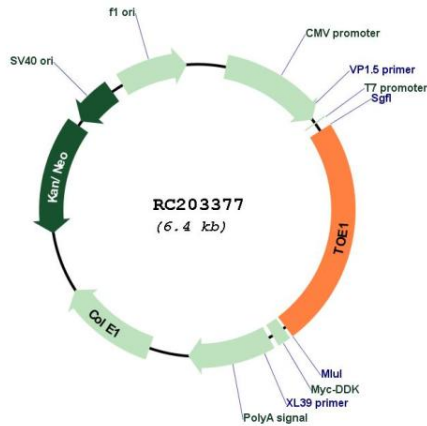
**Cytogenetics:** 1p34.1

**Protein Families:** Stem cell - Pluripotency, Transcription Factors

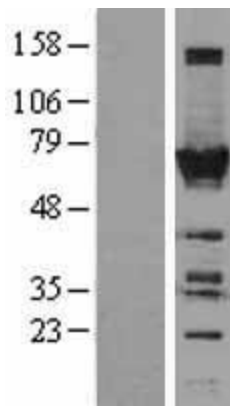
**MW:** 56.5 kDa

**Gene Summary:** Inhibits cell growth rate and cell cycle. Induces CDKN1A expression as well as TGF-beta expression. Mediates the inhibitory growth effect of EGR1. Involved in the maturation of snRNAs and snRNA 3'-tail processing (PubMed:28092684).[UniProtKB/Swiss-Prot Function]

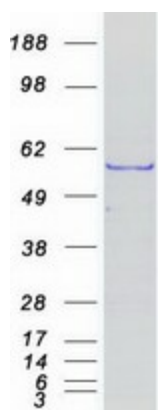
**Product images:**



Circular map for RC203377



Western blot validation of overexpression lysate (Cat# [LY403044]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203377 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TOE1 protein (Cat# [TP303377]). The protein was produced from HEK293T cells transfected with TOE1 cDNA clone (Cat# RC203377) using MegaTran 2.0 (Cat# [TT210002]).