

Product datasheet for **RC203597**

RUNX3 (NM_001031680) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUNX3 (NM_001031680) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RUNX3
Synonyms:	AML2; CBFA3; PEBP2aC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC203597 representing NM_001031680
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCATCGAACAGCATCTTCGACTCCTCCCGACCTACTCGCCGACCTTCATCCGCGACCAAGCACCA
 GCCGCGCTTACACCTCCCTCCCGGCTTCCCTGCGGCGCGCGGGGCAAGATGGGCGAGAACAG
 CGGCGCGCTGAGCGCGCAGGCGGCCGTGGGGCCCGGAGGCGCGCCCGGCGAGGTGCGCTCGATGGT
 GACGTGCTGGCGGACCACGAGGCGAGCTCGTGCACACGACAGCCCAACTTCTCTGCTCCGTGCTGC
 CCTCGACTGGCGCTGCAACAAGACGCTGCCCGTCGCCTCAAGGTGGTGGCATTGGGGACGTGCCGA
 TGGTACGGTGGTACTGTGATGGCAGGCAATGACGAGAACTACTCGCTGAGCTGCGCAATGCCTCGGCC
 GTCATGAAGAACCAGGTGGCCAGGTTCAACGACCTTCGTTCTGTTGGGCCGAGTGGGCGAGGAAGATT
 TACCCCTGACCATCACTGTGTTACCAACCCACCAAGTGGCGACCTACCACGAGCCATCAAGGTGAC
 CGTGGACGGACCCCGGAGCCAGACGGCACCGCAGAAGCTGGAGGACCAGACCAAGCCGTTCCCTGAC
 CGCTTTGGGGACCTGGAACGGCTGCGCATGCGGGTACACCGAGCACACCCAGCCCCGAGGCTCACTCA
 GCACCACAAGCCACTTCAGCAGCCAGCCCCAGACCCCAATCCAAGGCACCTCGGAACTGAACCCATTCTC
 CGACCCCGCCAGTTTGACCGCTCCTTCCCCACGCTGCCAACCTCACGGAGAGCCGCTTCCAGACCCC
 AGGATGCATTATCCCGGGCCATGTGAGCTGCCTTCCCTACAGCGCCACGCCCTCGGGCAGGATCA
 GCAGCCTCAGCGTGGCGGGCATGCCGGCCACCAGCCGCTTCCACCATACCTACCTCCCGCCACCTACCC
 GGGGGCCCGCAGAACCAGAGCGGGCCCTTCCAGGCCAACCCGTCCTTACCACCTTACTACGGGACA
 TCCTCTGGCTCTACAGTTCCTCATGGTGGCCGGCAGCAGCAGTGGGGCGACCGCTCACCTACCCGCA
 TGCTGGCTCTTGACCAGCAGCGCTGCCTCTGTGCGCCGGCAACCTCATGAACCCAGCCTGGGCGG
 CCAGAGTGATGGCGTGGAGGCCGACGGCAGCCACAGCAACTCACCCACGGCCCTGAGCACGCCAGGCCG
 ATGGATGAGCCGTGTGGCGCCCTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203597 representing NM_001031680
 Red=Cloning site Green=Tags(s)

MASNSIFDSFPTYSPTFIRDPSTSRRFTPPSPAFPCGGGGKMGENSGALSAQAAVGPGRARPEVRSMV
 DVLADHAGELVRTDSPNFLCSVLP SHWRCNKTLPVAFKVVALGDVPDGTVVVMAGNDENYSAELRNASA
 VMKNQVARFNDLRFVGRSGRGKSFLLITVFTNPTQVATYHRAIKVTVDPREPRRHRQKLEDQTKPFPD
 RFGDLERLRMRVTPSTPSRGSLSSTSHFSSQPQTPIQGTSELNPFSDPRQFDRSFPTLPTLTERSFDPD
 RMHYPGAMSAAFPYSATPSGTSISL SVAGMPATSRFHHTYLPPYPYGPAPQNSGPFQANPSPYHLYYGT
 SSGSYQFSMVAGSSGGDRSPTRMLASCTSSAASVAAGNLMNP SLGGQSDGVEADGSHSNSTALSTPGR
 MDEAVWRPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2598_c05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001031680

ORF Size: 1287 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

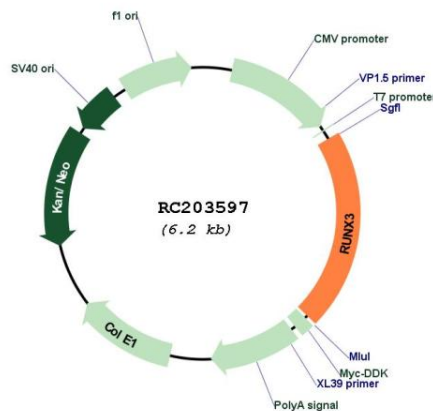
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

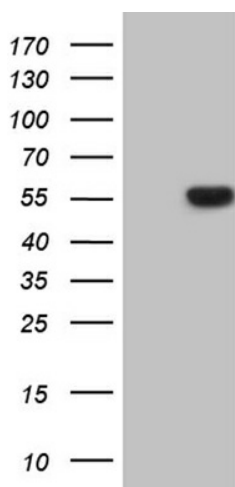
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001031680.2, NP_001026850.1</u>
RefSeq Size:	4340 bp
RefSeq ORF:	1290 bp
Locus ID:	864
UniProt ID:	<u>Q13761</u>
Cytogenetics:	1p36.11
Protein Families:	Transcription Factors
MW:	45.7 kDa
Gene Summary:	This gene encodes a member of the runt domain-containing family of transcription factors. A heterodimer of this protein and a beta subunit forms a complex that binds to the core DNA sequence 5'-PYGPYGGT-3' found in a number of enhancers and promoters, and can either activate or suppress transcription. It also interacts with other transcription factors. It functions as a tumor suppressor, and the gene is frequently deleted or transcriptionally silenced in cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

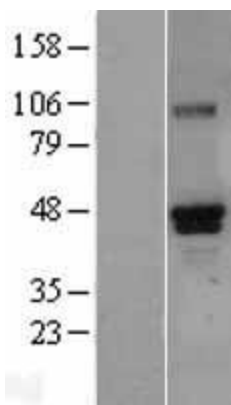
Product images:



Circular map for RC203597



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RUNX3 (Cat# RC203597, 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-RUNX3 (Cat# [TA810575])(1:2000). Positive lysates [LY400418] (100ug) and [LC400418] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400418]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203597 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).