

## Product datasheet for **RC204504**

### AP2 beta (TFAP2B) (NM\_003221) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AP2 beta (TFAP2B) (NM_003221) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AP2 beta
Synonyms:	AP-2B; AP-2beta; AP2-B; PDA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC204504 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCACTCACCTCCTAGAGACCAGGCTGCCATCATGCTCTGGAAGCTTGTGGAGAATGTCAAGTACGAAG  
 ATATCTATGAGGACCGGCACGATGGTGTCCCGAGCCACAGCTCGCGGCTCTCCAGCTGGGCTCGGTGTC  
 CCAAGGACCTACTCGAGCGCCCCGCGCTGTCCACACCCCGTCGTCGACTTCCAGCCGCCCTACTTC  
 CCACCCCTACCAGCCGCTCCCTACCACCAGAGCCAGGACCCCTACTCCACGTCAACGACCCCTACT  
 CCCTGAACCCACTGCACCAGCCGCAACATCCCTGGGGCAACGGCAGCGGCAAGAAGTGGTTCGGA  
 AGCCGGCTCTCCTGCCACGCTCGGGCCGCTTGGCCAGCTCTCGGGCCTTGACCCCGGAGGGAC  
 TACCCTCGGTCCGCGCGGACGTGCTGCTGCATTGCGGCACCACGGCTGGACGCGGGCATGGGTG  
 ACAGCCTCTCGTGCACGGCTCGGCCATCCCGAATGGAAGACGTCCAGTCAGTTGAAGATGCCAATAA  
 CAGCGCATGAATCTATTGGACCAGTCTGTCAATAAAAAAGTTCCAGTTCCTCCAAATCGGTGACTTCT  
 CTAATGATGAATAAAGACGGCTTCTGGGAGGCATGTCTGTCAACACCGCGAGGTGTTTTGCTCCGTCC  
 CAGGCCGTTTGTCTCTGCTCAGTTCAACTTCAAGTACAAAGTAACTGTGGGAGAAGTTCAGAGACGGCT  
 GTCGCCCCCTGAATGCCTCAATGCATCTCTCTCGGCGGAGTCCCTCAGAAGAGCCAAATCGAAAAATGGG  
 GGGAGATCTTTCGAGAAAGGCTAGAAAAATCGGTTTGAATTTACCCGCGGCGAGGCGCAAAGCAGCAA  
 ATGTCACGTTACTCACCTCCCTGGTGGAAAGGAGAAGCTGTTCACTTAGCTAGGGATTTGGGTACATTTG  
 CGAAACGGAGTTTCCCGCAAAGCCGCTCTGAGTATTTGAACCGGCAGCACACAGACCCGAGTGACCTG  
 CACTCCGAAAGAATATGCTGTTGGCCACCAAGCAACTTGTAAAGAATTTACGGATCTACTGGCGCAGG  
 ACCGGACACCGATAGGGAACAGCCGACCCAGCCCATCCTGGAGCCGGGATCCAGAGCTGCCTCACGCA  
 CTTCAGCCTCATCACGCACGGCTTCGGCGCCCCGCCATTTGCGCCGCGCTCACGGCCCTGCAGAACTAT  
 CTCACCGAGGCGCTCAAAGGCATGGACAAGATGTTCTTGAACAACACCACCACTAACAGGCACACGTCTG  
 GGAAGGCCAGGTAGTAAAAGTGGCGACAAGGAGGAGAAACACAGGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204504 protein sequence  
 Red=Cloning site Green=Tags(s)

MHSPPRDQAAIMLWKLVENVKYEDIYEDRHDGVPSSHSSRLSQLGSVSQGPYSSAPPLSHTPSSDFQPPYF  
 PPPYQPLPYHQSDPYSHVNDPYSLNPLHQPPQHPWQQRQVEVGSEAGSLLPQPRAALPQLSGLDPRRD  
 YHSVRRPDVLLHSAHHGLDAGMGDSLHLHGLGHPGMEDVQSVEDANNMGNLLDQSVIKKVPVPPKSVTS  
 LMMNKDGFLLGGMSVNTGEVFCVPGRLSLLSSTSKEYKVTVEVQRRLSPPECLNASLLGGVLRRAKSKNG  
 GRSLRERLEKIGLNLPAARRKAANVTLLTSLVEGEAVHLARDFGYICETEFPAKAVSEYLNQRHTDPSDL  
 HSRKNMMLLQKQCKEFTDLAQDRTPIGNSRPSPILEPGIQSCLTHFSLIITHGFGAPAICAALALQNY  
 LTEALGMDKMFLLNNTTNRHTSGEGPGSKTGDKKEEHRK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

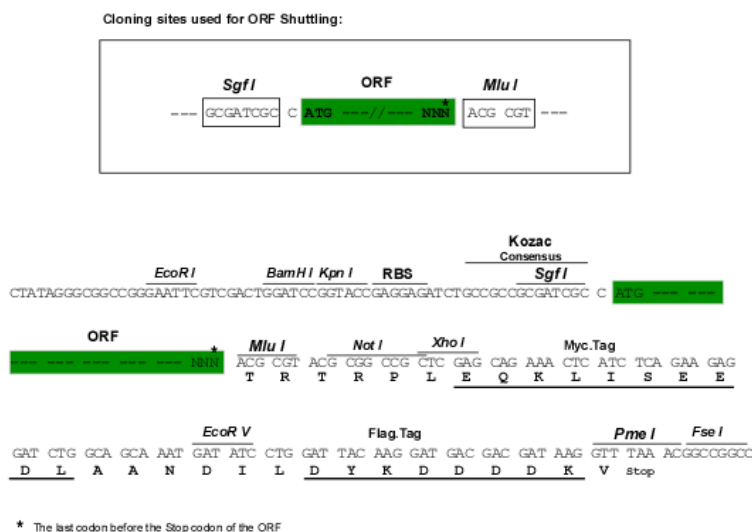
**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6013\\_c09.zip](https://cdn.origene.com/chromatograms/mk6013_c09.zip)

**Restriction Sites:**

Sgfl-Mlul

## Cloning Scheme:



ACCN: NM\_003221

ORF Size: 1380 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\\_003221.4](#)

RefSeq Size: 5770 bp

RefSeq ORF: 1383 bp

Locus ID: 7021

UniProt ID: [Q92481](#)

Cytogenetics: 6p12.3

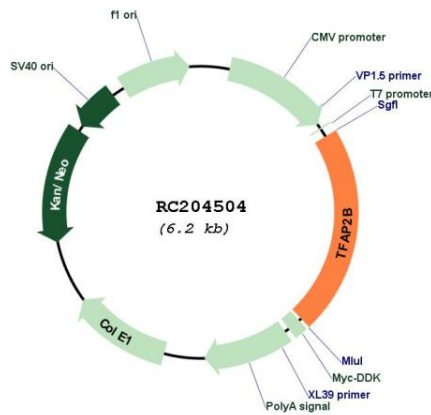
**Domains:** TF\_AP-2

**Protein Families:** Druggable Genome, Transcription Factors

**MW:** 50.5 kDa

**Gene Summary:** This gene encodes a member of the AP-2 family of transcription factors. AP-2 proteins form homo- or hetero-dimers with other AP-2 family members and bind specific DNA sequences. They are thought to stimulate cell proliferation and suppress terminal differentiation of specific cell types during embryonic development. Specific AP-2 family members differ in their expression patterns and binding affinity for different promoters. This protein functions as both a transcriptional activator and repressor. Mutations in this gene result in autosomal dominant Char syndrome, suggesting that this gene functions in the differentiation of neural crest cell derivatives. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC204504