

Product datasheet for **RC220630**

EBF2 (NM_022659) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EBF2 (NM_022659) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EBF2
Synonyms:	COE2; EBF-2; O/E-3; OE-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220630 representing NM_022659
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTGAATTCAAGATACTTTAGGAAGAGGACCAACTCTGAAAGAGAAATCGCTGGGCGCGGAGATGG
 ATTCGGTCAGGTCTGGGTCCGGAATGTCGGAGTGGTGGACGCTAATGTCGCCCGCAGAGCGGGTTCGC
 CCTGTCCCGGCCCACTTTGAGAAAACAGCCTCCTTCCAACCTTGAGGAAATCCAACCTCTTCACTTCGTC
 CTGGCGCTCTATGACAGGCAGGGCCAGCCGGTGGAGATCGAGCGGACGGCCTTCGTGGACTTTGTGGAGA
 ATGACAAAAGAACAAGGCAACGAGAAGACCAACAACGGCACTACTACAAGTTACAGCTCCTCTACAGCAA
 CGGTGTCCGCACGGAACAGGACCTCTATGTCAGGCTCATCGACTCGGTACCAAGCAGCCCATCGTTAC
 GAGGGACAGAATAAGAATCCGGAATGTCCGAGTTCTCCTGACGCACGAAGTATGTGTAGTCGATGCT
 GCGAAAAGAAAAGCTGTGAAACCGAAAATGAGACTCCATCGGACCCAGTCATAATTGACAGATTCTTTTT
 AAAATTTTCTCAAGTGAATCAGAATTGTTTAAAACAGCAGGAAACCAAGGGACATGAGACGGTTT
 CAGGTTGTGTGCAACAACGGTGAATGTGGATGGACACGTCCTGGCTGTTTCTGACAACATGTTGTTC
 ATAACAACCTCAAGCATGGACGGAGAGCAAGAAGACTCGATCCATCGGAAGCTACCCCTGCATCAAAGC
 CATTAGCCCGAGTGAAGGCTGGACCACAGGAGGAGCCATGGTCATCATCATCGGGGACAACCTTTTGTGAT
 GGTCTCCAAGTGGTGTGGGACTATGCTTGTATGGAGCGAGCTAATAACCCCTCATGCCATCAGAGTAC
 AGACTCCTCCCGGCACATCCAGGCGTGGTAGAGGTGACATTATCTTATAAATCTAAACAGTTCTGCAA
 AGGAGCCCCAGGAAGGTTCAATTTACACAGCATTAAATGAACCCACCATAGACTATGGCTTCCAGAGACTG
 CAGAAGGTACCTAGGCATCCTGGAGATCCTGAGAGATTAGCTAAGGAGATGCTGTTGAAAAGAGCTG
 CAGACTAGTGGAAAGCTCTTATGGCACACCACACAATAACAGGACATCATTTTGAAGCAGCCGCGAGA
 CATTGCTGAAGCTCTACAGCGTCCCGAGGAATCCAGCCAGCTCCAGCCCTCTCTAGCTCCCGAGCG
 CACAGTGGCATGATGGGAATCAACTCCTATGGCAGCCAGCTTGGGGTCAGCATCTCAGAGTCAACACAAG
 GAAATAATCAAGGTACATCCGCAACACAAGCAGCATCTCTCCGCGGGGATACTCTTCCAGCTCCACGCC
 TCAACAGTCTAATTACAGTACCTCCAGCAACAGTATGAATGGCTACAGCAATGTCCCATGGCCAACCTG
 GGTGTTCCAGGTTACCAGGATTTCTAAATGGCTACCCACCGGCTCTCCTTATGGAATCATGTCATCAA
 GTCCACCGTTGGGTCTCCAGCACATCCTCCATCCTCCATTTTCTCTCAGTTTTCTGCTGTCAA
 ACAGAAGAGTGCCTTTGCCCTGTATCAGGCCCAAGGCTCCCTTACCTGCCTGCTCCAGCGGCAAT
 GGAAATGGATTACAGCCATGACCGGACTTGTGTACCCCGATG

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220630 representing NM_022659
 Red=Cloning site Green=Tags(s)

MFGIQDTLGRGPTLKEKSLGAEMDSVRSWVRNVGVVDANVAAQSGVALSRAHFQPPSNLRKSNFFHFV
 LALYDRQQPVEIERTAFVDFVENDKEQNEKTNNNGTHYKQLLYSNGVRTEQDLVYRLIDSVTKQPIAY
 EGQKNKPEMCRVLLTHEVMCSRCEKKSCGNRNETPSDPVIIDRFLLKFFLKCNQNLKTAGNPRDMRRF
 QVVLSTTVNVDGHVLAUSDNMFVHNSKHGRRARRLDPEATPCIKAIISPSEGWTTGGAMVIIIGDNFFD
 GLQVVFVGTMLVWSELITPHAIRVQTPPRHIPGVVEVTL SYKSKQFCKGAPGRFIYALNEPTIDYGFQRL
 QKVIPRHPGDPERLAKEMLLKRAADLVEALYGTPHNNQDIILKRAADIAEALYSVPRNPSQLPALSSSPA
 HSGMMGINSYGSQGLVSIESTQGNQGYIRNTSSI SPRGYSSSSTPQQSNYSTSSNSMNGYSNVPANL
 GVPGPSGFLNGSPTGSPYIMSSSPTVGSSTSSILPFSSSVFPAVKQKSAFAPVIRPQGSPPACSSGN
 GNGFRAMTGLVPPM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8042_c07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_022659

ORF Size: 1725 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.

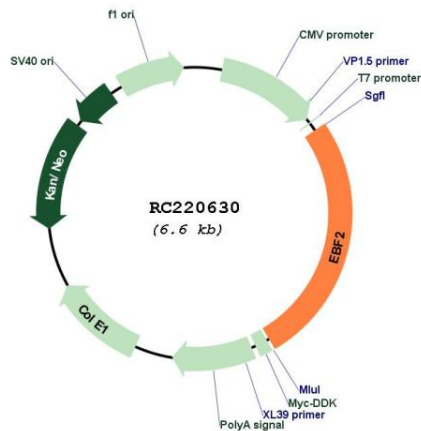
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

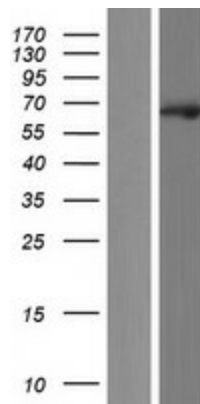
RefSeq: [NM_022659.4](#)
RefSeq Size: 2297 bp
RefSeq ORF: 1728 bp
Locus ID: 64641
UniProt ID: [Q9HAK2](#)
Cytogenetics: 8p21.2
MW: 62.5 kDa

Gene Summary: The protein encoded by this gene belongs to the COE (Collier/Olf/EBF) family of non-basic, helix-loop-helix transcription factors that have a well conserved DNA binding domain. The COE family proteins play an important role in variety of developmental processes. Studies in mouse suggest that this gene may be involved in the differentiation of osteoblasts. [provided by RefSeq, Oct 2011]

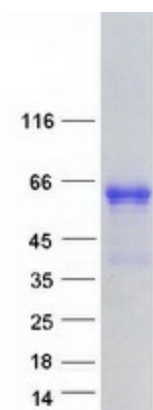
Product images:



Circular map for RC220630



Western blot validation of overexpression lysate (Cat# [LY411603]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220630 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EBF2 protein (Cat# [TP320630]). The protein was produced from HEK293T cells transfected with EBF2 cDNA clone (Cat# RC220630) using MegaTran 2.0 (Cat# [TT210002]).