

## Product datasheet for RC201653

### EBP50 (SLC9A3R1) (NM\_004252) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EBP50 (SLC9A3R1) (NM_004252) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EBP50
Synonyms:	EBP50; NHERF; NHERF-1; NHERF1; NPHLOP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201653 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGCGGACGCAGCGGCCGGGGCGCCCTGCCCGGCTCTGCTGCCTGGAGAAGGGTCCGAACGGCT  
ACGGCTTCCACCTGCACGGGGAGAAGGGCAAGTTGGCCAGTACATCCGGCTGGTGGAGCCCGGCTCGCC  
GGCCGAGAAGGCGGGGCTGCTGGCGGGGACCGGCTGGTGGAGGTGAACGGCGAAAACGTGGAGAAGGAG  
ACCCACCAGCAGGTGGTGGAGCCGATCCGCGCCGACTCAACGCCGTGCGCTGCTGGTGGTGCACCCCG  
AGACGGACGAGCAGCTGCAGAAGCTCGGCGTCCAGGTCCGAGAGGAGCTGCTGCGCGCCAGGAAGCGCC  
GGGGCAGGCCGAGCCGCCGGCCGCGGAGGTGCAGGGGGCTGGCAACGAAAATGAGCCTCGCAGAGGCC  
GACAAGAGCCACCCGGAGCAGCGGAGCTTCGGCTCGGCTCTGTACCATGAAGAAGGGCCCAAGTGGCT  
ATGGCTTCAACCTGCACAGCGACAAGTCCAAGCCAGGCCAGTTCATCCGGTCAAGTGGACCCAGACTCCCC  
GGCTGAGGCTTCAAGGCTCCGGGCCAGGATCGCATTGTGGAGGTGAACGGGGTCTGCATGGAGGGGAAG  
CAGCATGGGGACGTGGTGTCCGCCATCAGGGCTGGCGGGGACGAGACCAAGTGCCTGGTGGTGGACAGGG  
AAACTGACGAGTCTTCAAGAAATGCAGAGTGATCCCATCTCAGGAGCACCTGAATGGTCCCCTGCCTGT  
GCCCTTACCAATGGGGAGATACAGAAGGAGAAGTCCGTGAAGCCCTGGCAGAGGCAGCCTTGGAGAGC  
CCCAGGCCAGCCCTGGTGGATCCGCTCCAGTGACACCAGCAGGAGCTGAATCCCAAGACAGCCCCC  
CAAAACAGGACTCCACAGCGCCCTCGTCTACCTCCTCCTCCGACCCCATCCTAGACTTCAACATCTCCCT  
GGCCATGGCCAAAGAGAGGGCCACCAGAAACGCAGCAGCAAACGGGCCCGCAGATGGACTGGAGCAAG  
AAAAACGAACTCTCAGCAACTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC201653 protein sequence  
Red=Cloning site Green=Tags(s)

MSADAAAGAPL PRLCCLEKGPNGYGFHLHGEKGLGQYIRLVEPGSPA EKAGLLAGDRLVEVNGENVEKE  
 THQQVVSRI RAALNAVRLLVDPETDEQLQKLG VQVREELLRAQEAPGQAEP PAAAEVQGAGNENEPREA  
 DKSHPEQRELRPRLCTMKKGP SGYGFNLHSDKSKPGQFIRSVDPDSPA EASGLRAQDRIVEVNGVCM EGK  
 QHGDVVS AIRAGGDETKLLVVDRETDEFK KCRVIPSQEHLNGLPVPVFTNGEIQKENSREALAEAALES  
 PRPALVRSASD TSEELNSQDSPPKQDSTAPSS TSSSDPILDFNISLAMA KERAHQKRSSKRAPQMDWSK  
 KNELFSNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6195\\_b03.zip](https://cdn.origene.com/chromatograms/mk6195_b03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004252

**ORF Size:** 1074 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\\_004252.5](#)

**RefSeq Size:** 2032 bp

**RefSeq ORF:** 1077 bp

**Locus ID:** 9368

**UniProt ID:** [O14745](#)

**Cytogenetics:** 17q25.1

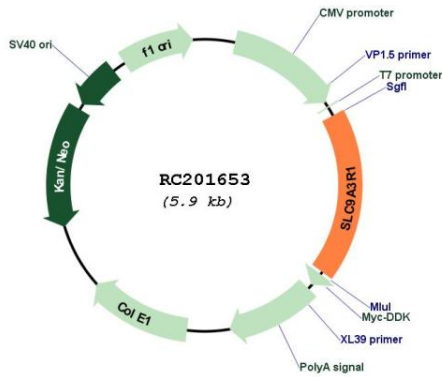
**Domains:** PDZ

**Protein Families:** Druggable Genome

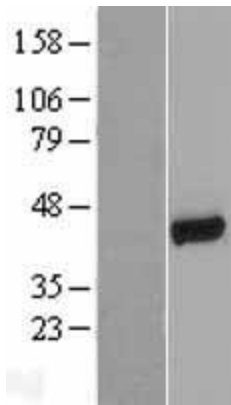
**MW:** 38.9 kDa

**Gene Summary:** This gene encodes a sodium/hydrogen exchanger regulatory cofactor. The protein interacts with and regulates various proteins including the cystic fibrosis transmembrane conductance regulator and G-protein coupled receptors such as the beta2-adrenergic receptor and the parathyroid hormone 1 receptor. The protein also interacts with proteins that function as linkers between integral membrane and cytoskeletal proteins. The protein localizes to actin-rich structures including membrane ruffles, microvilli, and filopodia. Mutations in this gene result in hypophosphatemic nephrolithiasis/osteoporosis type 2, and loss of heterozygosity of this gene is implicated in breast cancer.[provided by RefSeq, Sep 2009]

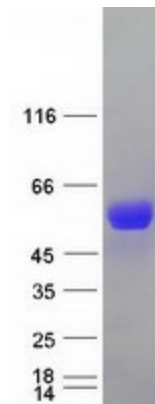
Product images:



Circular map for RC201653



Western blot validation of overexpression lysate (Cat# [LY401364]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201653 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC9A3R1 protein (Cat# [TP301653]). The protein was produced from HEK293T cells transfected with SLC9A3R1 cDNA clone (Cat# RC201653) using MegaTran 2.0 (Cat# [TT210002]).