

## Product datasheet for **RC228971**

### **BEGAIN (NM\_001159531) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BEGAIN (NM_001159531) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BEGAIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC228971 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAACTCAGCGCGCTGCAGGAGCAGAAGGGCGAGCTGCGCAAGCGGCTGTCTACACCACACACA  
 AGCTCGAGAAGCTCGAGACCGAGTTCGACTCCAGCGCCACTACCTGGAGATCGAGCTGCGGCGCGCGCA  
 GGAGAACTGGAGAAGGTCACGGAGAAGCTGCGCAGGATTCAGAGCAACTACATGGCACTGCAGAGGATC  
 AACCGAGAGCTGGAGGACAAGCTGTACCGCATGGGCCAGCACTATGAGGAGGAGAAGCGTGCCTGAGCC  
 ACGAGATTGTTGCCCTCAACAGCCATCTGCTAGAAGCCAAGGTGACCATCGACAAGCTGTGAGAGGACAA  
 CGAGCTCTATAGGAAGGACTGCAATCTAGCGGCCAGCTGCTGCAGTGCAGCCAGACCTACGGCAGGGTC  
 CACAAGGTGTCTGAGCTGCCCTCGGATTTCCAGGAGCGCGTGAGCCTGCACATGGAGAAGCACGGCTGCA  
 GCCTGCCATCCCCGCTCTGCCACCCGGCCTACGCCGACAGCGTCCCCACCTGCGTCATTGCCAAGGTGCT  
 GGAGAAGCCGGACCCCGCAGCCTGTCTCCCGCTGTCCGATGCCTCCGCCCGCAGCTGGCCTTCTGC  
 GACGGGTGGAGAAACAGGCCCGCGGCCCTACAAGGGAGACATCTACTGCAGTGCACAGCCCTCT  
 ACTGCCCGGAGGAGCGCGGCGAGACCGCGGCCCTAGCGTGGACGCGCCCGTGCACGAGTGGGTTCTCT  
 GCGGGCCAGAACTCCAAGTGCAGCGCGGCCGAGGAGGAGGAGGAGGCGGAGCGCGGCCCTCCCGGCG  
 GGCTTCCAGCATGAGGCCCTCCCGAGCTACGCAGGCTCACTGCCACGTCAGCTCCTACTCCAGCTTCA  
 GCGCCAGTGGAGGAGAAGGAGCAGCGCAGGCCAGCACGCTGACCGCGTGCAGCAGGCCATCTACCT  
 GAACAGCCGCGACGAGCTCTTCGACCGCAAGCCACCCGCCACCACCTACGAGGGCAGCCCTCGCTTTGCC  
 AAGGCCACGGCCGCGTGGCGGCCCGCTGGAGGCCGAAGTGGCCCAAGGCTTCGGGCGGACCATGTAC  
 CGTACCCGGCCGAGACCTTCCGCTTCCCGCCTCTCCGGTCCCAGCAGGCCCTGATGCCCCAAAACCT  
 GTGGAGCCTGCGGGCCAAGCCGGGACCGCCCGCTCCCGGGGAGGACATGAGGGGCCAGTGGCGTCCC  
 CTGAGCGTGGAGGACATCGGCGCCTACTCTACCCCGTGCAGCGTGCAGCGCGCCCTACCCTGCAGT  
 TCTCTGAACGCTACTACGGCGGGCCGGGGCAGCCGGGCAAGAAGGCCGACGGCCGCGCCAGCCCGCT  
 CTACGCCAGTACAAGGCCGACAGCTTCTCCGAGGGGACGACCTCTCCAGGGCCACTGGCAGAGCCC  
 TGCTTCTGCGGGCGGGCGGACCTGAGCCTCAGTCCCGGCCGCTCGGCTGACCCACTGCCCGGTATG  
 CACCCAGCAGGGGGGGACGGGACAGGCTCGGGTGCAGCTGTGTGGACCGCCAGCAGCCCTGAGCC  
 CGAGCAGGTTCCAGGACTCCTTGAGCCGAGCTCCATGGAGGCTCCCGGAAATGCATCTGCCGCC  
 CGCTCAGCCCCAGCAGCCTTCCGCGGACTGGTGGCTCGGGCTGAGCCGAAGGACAGCCTACCA  
 AGGCCAGCTCTACGGAACCTTGTCAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228971 protein sequence  
 Red=Cloning site Green=Tags(s)

MEKLSALQEYKQKELRKRLSYTTHKLEKLETFDSTRHYLEIELRRAQEELEKVTAKLRRISNYMALQRI  
 NQELEDKLYRMGQHYEEKRALSHEIVALNSHLLLEAKVTIDKLSLDELNLYRDKNLAAQLLQCSQTYGRV  
 HKVSELPDFQERVSLHMEKHGCSLPSLCHPAYADSVPTCVIAKVLKPDPASSLSSRLSDASARDLAF  
 DGVEKPGPRPPYKGDIIYCSDTALYCPPEERRRRRPSVDAPVTDVGFRAQNSTDSAAAAEAEAAAFPA  
 GFQHEAFPSYAGSLPTSSSYSSFATSEEKEHAQASTLTASQQAIIYLSNRDELFDKPPATTYEGSPRFA  
 KATAAVALPAAEAEVAPGFGRMTSPYPAETFRFPASPGPQALMPPNLWSLRAKPGTARLPGEDMRGQWRP  
 LSVEDIGAYSYPVSAAGRASPCSFERYGGAGGSPGKADGRASPLYASYKADSFSEGDDLSQLHLAEP  
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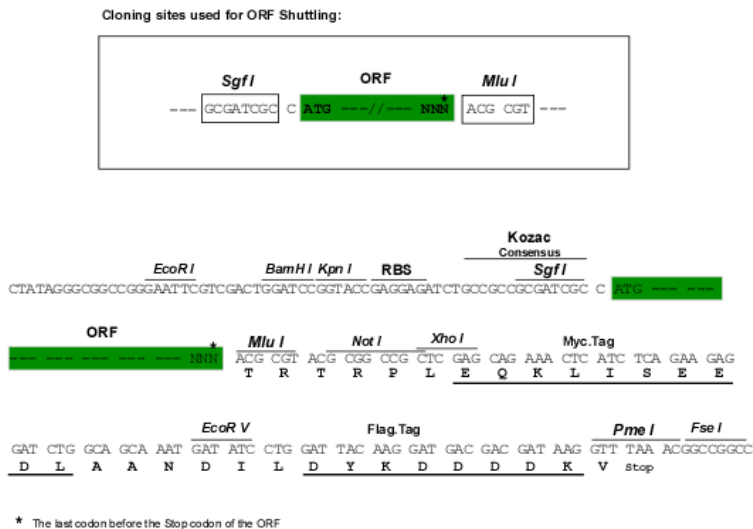
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6582\\_b01.zip](https://cdn.origene.com/chromatograms/mk6582_b01.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001159531

ORF Size: 1779 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.

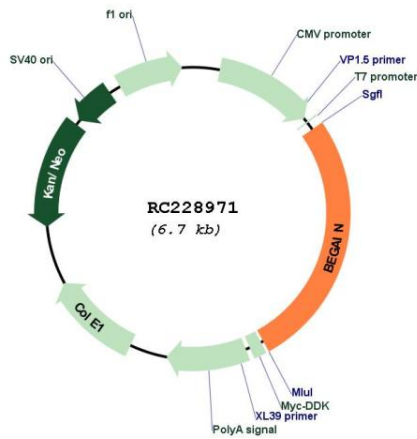
RefSeq: [NM\\_001159531.1](#), [NP\\_001153003.1](#)

RefSeq Size: 2763 bp

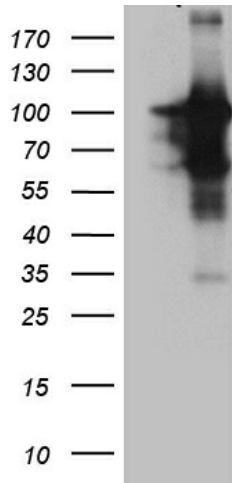
RefSeq ORF: 1782 bp

Locus ID: 57596

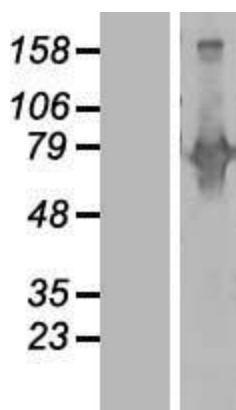
**UniProt ID:** [Q9BUH8](#)  
**Cytogenetics:** 14q32.2  
**Protein Families:** Druggable Genome  
**MW:** 64.8 kDa  
**Gene Summary:** May sustain the structure of the postsynaptic density (PSD).[UniProtKB/Swiss-Prot Function]

**Product images:**


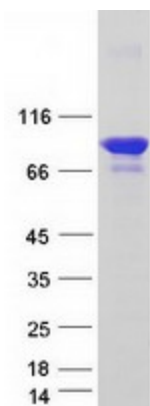
Circular map for RC228971



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BEGAIN (Cat# RC228971, 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-BEGAIN (1:2000) (Cat# [TA810782]). Positive lysates [LY431998] (100ug) and [LC431998] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431998]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228971 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BEGAIN protein (Cat# [TP328971]). The protein was produced from HEK293T cells transfected with BEGAIN cDNA clone (Cat# RC228971) using MegaTran 2.0 (Cat# [TT210002]).