

Product datasheet for **RR200323**

Epn2 (NM_001033914) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epn2 (NM_001033914) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Epn2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RR200323 representing NM_001033914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACAATTCATCTATTAGACGGCAGATGAAAAACATTGTGAACAATTACTCAGAGGCTGAAATCAAAG
TCCGGGAAGCCACTCCAATGACCCATGGGGCCATCCAGCTCTCTGATGACTGAGATTGCTGACCTGAC
CTATAATGTGGTAGCCTTCTCGGAGATCATGAGCATGGTTTGAAGCGGCTTAATGACCATGGCAAGAAC
TGGCGACATGTATAAAGGCGCTGACACTGCTGGACTACCTTATCAAGACAGTTCTGAGCGGGTGGCC
AGCAGTGTGGGAGAACATCTTTGCTATACAGACTCTGAAGGACTTCCAGTACATTGACCGTGATGGCAA
GGACCAGGGTATTAATGTTGAGAGAAGTCAAAGCAACTGGTTGCTCTCCTCAAGGATGAGGAGCGGCTG
AAGTTGAGAGGGTTCAGGCTCTAAAACCAAAGAGCGCATGGCTCAGGTGGCCACTGGTGTGGGCAGCA
ACCAGATCACCTTCGGTCGAGGCTCCAGCCAGCCCAACCTTTCTACCAGTACTCAGAGCAAGAGTATGG
CAAGGCTGGGGGCTCGCCGGCTCTACCAGGCTCGCCAGAGGCTCTCTGTGCCCCAGCACCAGCACA
GGGGCCATGCTGGGTGAGAGTGAGGAGCTGCAGCCACTGAGCCAGCGCCACCCCTGCCTGCCGACCTGG
GCCTAGCCTCCCACCAATGGCGACTGGGCCAGCCCTGCCTCACTTGTGACCGCGCAGCCGAGCTAC
TCCCCACGAGTGTCTCTGAGTTGAGAGAGGCCCGGCCACAGACCAGCGGAGAAGAGGAGCTGCAGCTG
CAACTGGCACTTGCCATGAGCAGAGAGGTTGCAGAACAGGAAGAACGCCCTCAGGCGGGGTGATGACCTCA
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GAACCGTGGCACCTGCGAACATTTCTGACCCCTGGCCTTCAATTTGGTACCAAGCCAGCTGCCTCTGTGGA
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CAGCAGCCTGCCTCCGATGCTGGAAAAACAGTATGCCTGGGGGCTGCCAAGCCTAGTCTGCCTCAG
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CTCTTTGAGTCTCAATCCTTGACTTCTGCCTCGAGCAAGCCTAGCAGTGTCTGGAAAACACCTGAGTCT
TCCTGGGCCCAATGCAGCACTGGTGAACCTGGACTCACTGGTACTAAGCCTAATCCACCAGCTCAGTC
CCTCAATCCCTTCTGGCACCAGGTGCTGCTGCTCCAGCTCCTGTCAATCCCTTTCAGGTCAACCAGCCC
CAGCCACTGACACTGAACCAGCTTCGGGAAGCCCTGTCTGGGAAGCAGTGCCTCTTTGGGTCTGGTC
CAGGGGTGGAGACGGTGGCTCCCATGCCCTCTGTAGCTCCACACTCAGCACTGGGGGCCACTGGCTCCTC
ATTGACACCACTAGGCCCTACAGCAATGAACATGGTAGGCAGTGTGGGTATTCGCCCATCAGCAGCTCAG
CCAGCGGGCACAACCAACCCCTTCTTCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200323 representing NM_001033914
 Red=Cloning site Green=Tags(s)

MTTSSIRRQMKNI VNNYSEAEIKVREATSNDPWGPSSSLMTEIADLTYNVVFSEIMSMVWKR LNDHGKN
 WRHVYKAL TLLDYL IKTGSERVAQQCRENIFAIQTLKDFQYIDRDGKDQGINVREKSKQL VALLKDEERL
 KVERVQALKTKERMAQVATGVGSNQITFGRGSSQPNLSTSYSEQEYKAGGSPASYHGSPEASLCPQHRT
 GAMLGQSEELQPLSQRHPCLPHLGLASHPNGDWAQPCL TCDRAARATSPRVSSLEQARPQTS GEEELQL
 QLALAMSREVAEQEERLRRGDDLRLQMALEE SRRD TVKVPKKKEVKACCKPGSHSQQTLLDLMDALPSS
 GPVAQKTEPWSTGTPANQTPNWGGTVAPANISDPWPSFGTKPAASVDPWGVPTTASIQSVPKNSDPWAAS
 QQPASDAGKTADAWGAAKPSPASGSFELFSNFNGTVKDDFSEFDNLR TSKKPAESGASVPPQDSRTTSPD
 LFESQSLTSASSKPSSARKTPESFLGPNAALVNLDSLVTKNPPAQSLNPFLAPGAAAPVNPVQVNPQ
 QPLTLNQLRGSPVLGSSASFGSGPGVETVAMPSPVAPHSALGATGSSLTPLGPTAMNMVGSVGIPPSAAQ
 PAGTTNPFLL

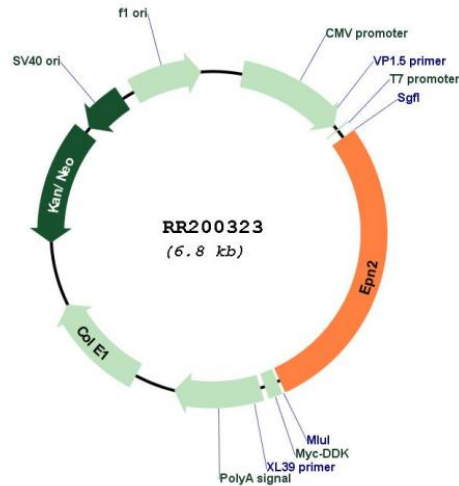
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001033914

ORF Size: 1920 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_001033914.2](#), [NP_001029086.1](#)

RefSeq Size: 4344 bp

RefSeq ORF: 1923 bp

Locus ID: 60443

Cytogenetics: 10q22

MW: 68.5 kDa

Gene Summary: The protein encoded by this gene is a member of the epsin protein family. Epsin proteins are endocytic adaptors that function in the formation of clathrin-coated vesicles. Epsins contain a highly conserved N-terminal homology domain that binds phosphatidylinositol 4,5-bisphosphate in the plasma membrane, two or three ubiquitin interacting motifs, two clathrin-binding motifs, a cluster of aspartate-proline-tryptophan/phenylalanine repeats, and two or three asparagine-proline-phenylalanine tripeptide repeats at the C-terminus. In mouse, simultaneous knockout of this gene and its paralog results in embryonic arrest due to disruption of Notch signaling, suggesting a role as a specialized endocytic adaptor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]