

Product datasheet for **RC226982**

REA (PHB2) (NM_001144831) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	REA (PHB2) (NM_001144831) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	REA
Synonyms:	BAP; Bap37; BCAP37; hBAP; p22; PNAS-141; REA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226982 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGAACTGAAGGACTTGGCGGGACGGCTGCCCGCCGGGCCCGGGGCATGGGCACGGCCCTGA
AGCTGTTGCTGGGGGCCGGCGCCGTGGCTACGGTGTGCGCGAATCTGTGTTACCGTGAAGGCGGGCA
CAGAGCCATCTTCTTCAATCGGATCGGTGGAGTGCAGCAGGACACTATCCTGGCCGAGGGCCTTCACTTC
AGGATCCCTTGGTCCAGTACCCATTATCTATGACATTCGGGCCAGACCTCGAAAAATCTCCTCCCTCA
CAGGCTCCAAAGACCTACAGATGGTGAATATCTCCCTGCGAGTGTGTCTCGACCAATGCTCAGGAGCT
TCCTAGCATGTACCAGCGCTAGGGCTGGACTACGAGGAACGAGTGTGCGCTCCATTGTCAACGAGGTG
CTCAAGAGTGTGGTGGCCAAGTTCAATGCCTCACAGCTGATCACCCAGCGGGCCAGGTATCCCTGTTGA
TCCGCCGGGAGCTGACAGAGAGGGCCAAGGACTTCAGCCTCATCCTGGATGATGTGGCCATCACAGAGCT
GAGCTTTAGCCGAGAGTACACAGCTGCTGTAGAAGCCAAACAAGTGGCCAGCAGGAGGCCAGCGGGCC
CAATTCTTGGTAGAAAAAGCAAAGCAGGAACAGCGGCAGAAAAATTGTGCAGGCCGAGGGTGAAGCCGAGG
CTGCCAAGATGCTTGGAGAAGCACTGAGCAAGAACCCTGGCTACATCAAATTCGCAAGATTCGAGCAGC
CCAGAATATCTCCAAGACGATCGCCACATCACAGAATCGTATCTATCTCACAGCTGACAACCTTGTGCTG
AACCTACAGGATGAAAGTTTACCAGGGGAAGTACAGCCTCATCAAGGGTAAGAAA

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC226982 protein sequence
Red=Cloning site Green=Tags(s)

MAQNLKDLA~~GR~~LPA~~GR~~PMGTALKLLL~~GAGAVAYGVRESVFTVEGGHRAIFFNRIGGVQ~~QDTILA~~EGLHF~~
 RIPWFQYPIIYDIRARPRKISSPTGSKDLQMVNLSLRVLSRPNAQELPSMYQRLGLDYE~~ERVLP~~PSIVNEV
 LKSVVAKFNASQLITQRAQVSL~~LIRREL~~TERAKDFSLI~~LDDVAITELSF~~SREY~~TAAVEAKQVAQQEAQRA~~
 QFLVEKAKQEQRQKIVQAEGEAEAAKMLGEALSKNPGYIKLRKIRAAQNI~~SKTIATSQNR~~IYLTADNLVL
 NLQDES~~FTRGSDSLIKGKK~~

TRTRPLE~~QKLISEEDLAANDILDYKDDDDK~~V

Chromatograms: https://cdn.origene.com/chromatograms/mk6005_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001144831

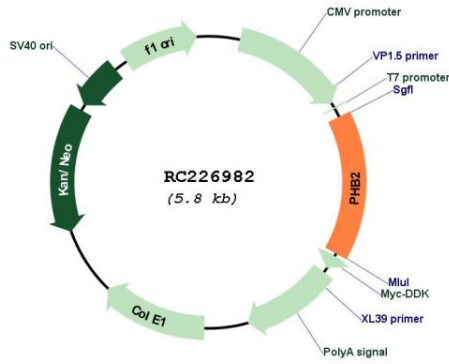
ORF Size: 897 bp

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.

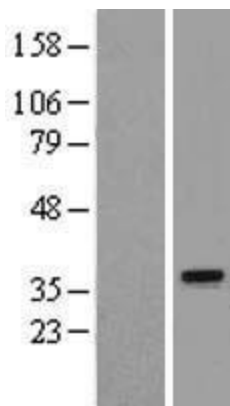
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_001144831.2
RefSeq Size:	1457 bp
RefSeq ORF:	900 bp
Locus ID:	11331
UniProt ID:	Q99623
Cytogenetics:	12p13.31
Protein Families:	Druggable Genome, Transcription Factors
MW:	33.3 kDa
Gene Summary:	Acts as a mediator of transcriptional repression by nuclear hormone receptors via recruitment of histone deacetylases (By similarity). Functions as an estrogen receptor (ER)-selective coregulator that potentiates the inhibitory activities of antiestrogens and represses the activity of estrogens. Competes with NCOA1 for modulation of ER transcriptional activity. In mitochondria, regulates cytochrome-c oxidase assembly (COX) and mitochondrial respiration. Binding to sphingoid 1-phosphate (SPP) modulates its regulator activity (PubMed:20959514).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC226982



Western blot validation of overexpression lysate (Cat# [LY428526]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226982 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).