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Product datasheet for RC208063

RBP3 (NM_002900) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RBP3 (NM_002900) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RBP3
Synonyms:	D10S64; D10S65; D10S66; IRBP; RBPI; RP66
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208063 representing NM_002900
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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CTGCTCCTGTCCTACTTCCAGGGCCCTGAGGCCGGCCCCGTGCACCTCTTCACCACCTATGATCGCCGCA
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Protein Sequence:

>RC208063 representing NM_002900
Red=Cloning site Green=Tags(s)

MMREWVLLMSVLLCGLAGPTHLFQPSLVLDMAKVLLDNYCFPENLLGMQEAIQQAIKSHEILSISDPQTL
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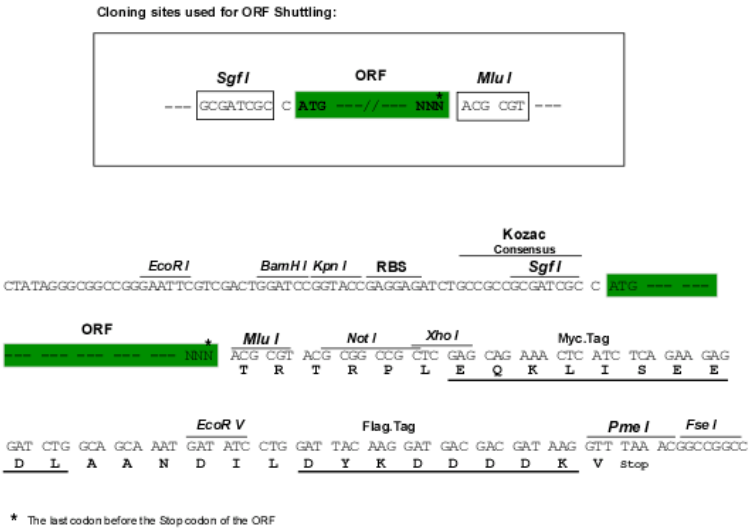
Restriction Sites: SgfI-MluI

Cloning Scheme:



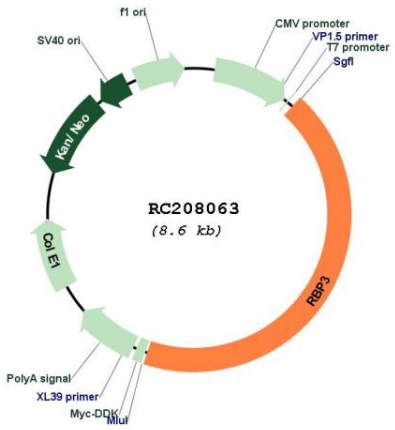
ACCN: NM_002900

ORF Size: 3741 bp

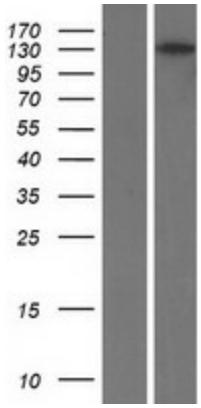
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_002900.3
RefSeq Size:	4289 bp
RefSeq ORF:	3744 bp
Locus ID:	5949
UniProt ID:	P10745
Cytogenetics:	10q11.22
Protein Families:	Secreted Protein
MW:	135.36 kDa

Gene Summary: Interphotoreceptor retinol-binding protein is a large glycoprotein known to bind retinoids and found primarily in the interphotoreceptor matrix of the retina between the retinal pigment epithelium and the photoreceptor cells. It is thought to transport retinoids between the retinal pigment epithelium and the photoreceptors, a critical role in the visual process.The human IRBP gene is approximately 9.5 kbp in length and consists of four exons separated by three introns. The introns are 1.6-1.9 kbp long. The gene is transcribed by photoreceptor and retinoblastoma cells into an approximately 4.3-kilobase mRNA that is translated and processed into a glycosylated protein of 135,000 Da. The amino acid sequence of human IRBP can be divided into four contiguous homology domains with 33-38% identity, suggesting a series of gene duplication events. In the gene, the boundaries of these domains are not defined by exon-intron junctions, as might have been expected. The first three homology domains and part of the fourth are all encoded by the first large exon, which is 3,180 base pairs long. The remainder of the fourth domain is encoded in the last three exons, which are 191, 143, and approximately 740 base pairs long, respectively. [provided by RefSeq, Jul 2008]

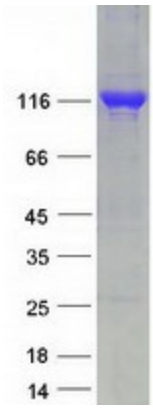
Product images:



Circular map for RC208063



Western blot validation of overexpression lysate (Cat# [LY419026]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208063 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RBP3 protein (Cat# [TP308063]). The protein was produced from HEK293T cells transfected with RBP3 cDNA clone (Cat# RC208063) using MegaTran 2.0 (Cat# [TT210002]).