

Product datasheet for RC208063L4V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

RBP3 (NM_002900) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: RBP3 (NM_002900) Human Tagged ORF Clone Lentiviral Particle

Symbol: RBP3

Synonyms: D10S64; D10S65; D10S66; IRBP; RBPI; RP66

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_002900 **ORF Size:** 3741 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC208063).

Sequence:

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.

RefSeq: <u>NM 002900.2</u>

 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]