

Product datasheet for **RC218816**

RRBP1 (NM_001042576) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRBP1 (NM_001042576) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RRBP1
Synonyms:	ES/130; ES130; hES; p180; RRp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC218816 representing NM_001042576
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

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Protein Sequence: >RC218816 representing NM_001042576
 Red=Cloning site Green=Tags(s)

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EASQLKERLEKEKLLTSDLGRAATRLQELLKTTQEQLAREKDTVKKLQEQLKAEDGSSSKEGTSV
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8005_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

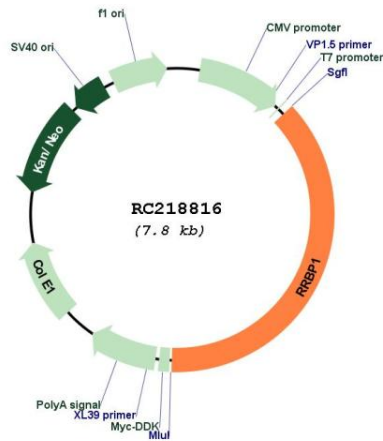
ACCN: NM_001042576

ORF Size: 2931 bp

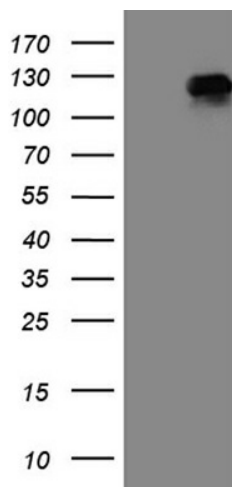
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001042576.1 , NP_001036041.1
RefSeq Size:	3792 bp
RefSeq ORF:	2934 bp
Locus ID:	6238
UniProt ID:	Q9P2E9
Cytogenetics:	20p12.1
Protein Families:	Druggable Genome, Transmembrane
MW:	108.5 kDa

Gene Summary:

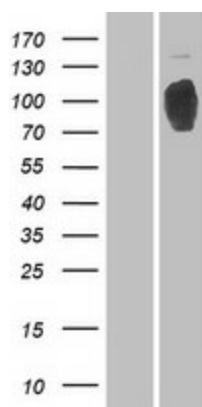
This gene encodes a ribosome-binding protein of the endoplasmic reticulum (ER) membrane. Studies suggest that this gene plays a role in ER proliferation, secretory pathways and secretory cell differentiation, and mediation of ER-microtubule interactions. Alternative splicing has been observed and protein isoforms are characterized by regions of N-terminal decapeptide and C-terminal heptad repeats. Splicing of the tandem repeats results in variations in ribosome-binding affinity and secretory function. The full-length nature of variants which differ in repeat length has not been determined. Pseudogenes of this gene have been identified on chromosomes 3 and 7, and RRBP1 has been excluded as a candidate gene in the cause of Alagille syndrome, the result of a mutation in a nearby gene on chromosome 20p12. [provided by RefSeq, Apr 2012]

Product images:


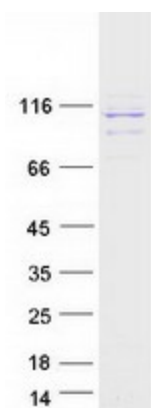
Circular map for RC218816



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RRBP1 (Cat# RC218816, 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-RRBP1 (Cat# [TA809626])(1:2000). Positive lysates [LY420989] (100ug) and [LC420989] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY420989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218816 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RRBP1 protein (Cat# [TP318816]). The protein was produced from HEK293T cells transfected with RRBP1 cDNA clone (Cat# RC218816) using MegaTran 2.0 (Cat# [TT210002]).