

## Product datasheet for **RC205943**

### Albumin (ALB) (NM\_000477) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Albumin (ALB) (NM_000477) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Albumin
Synonyms:	FDAHT; HSA; PRO0883; PRO0903; PRO1341
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC205943 representing NM\_000477  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGTGGGTAACCTTTATTTCCCTTCTTTTTCTCTTTAGCTCGGCTTATTCCAGGGGTGTGTTTCGTC  
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 TTGGAGACAAAATTATGCACAGTTGCAACTCTTCGTGAAACCTATGGTGAATGGCTGACTGCTGTGCAAA  
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 CCCAAGGCAACAAAAGAGCAACTGAAAGCTGTTATGGATGATTTGCGAGCTTTTGTAGAGAAGTGTGCA  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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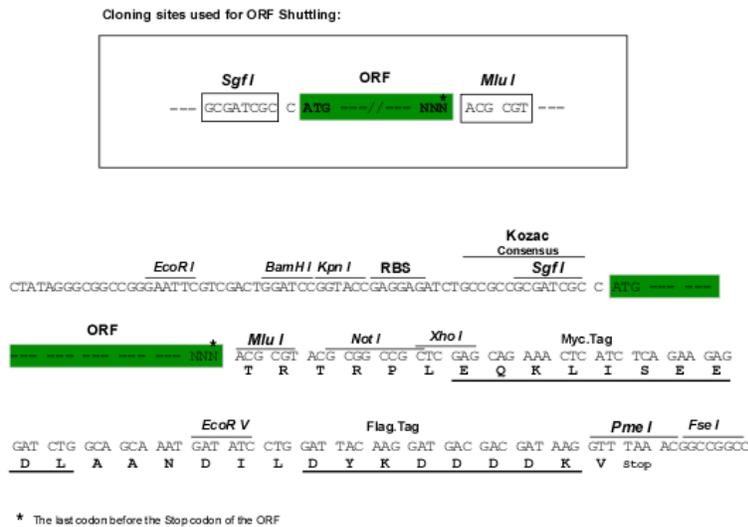
**Protein Sequence:**

>RC205943 representing NM\_000477  
 Red=Cloning site Green=Tags(s)

MKWVTFISLLFLFSSAYSRGVFRDRAHKSEVAHRFKDLGEENFKALVLI AFAQYLQQPFEDHVKLVNEV  
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 RPEVDVMCTAFHDNEETFLKKYL YEIARRHPYFYAPEL LFFAKRYKAAFTECCQAADKAACLLPKLDLDEL  
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 LGMFLYEYARRHPDYSVLLLRLLAKTYETLEKCAAADPHECYAKVFDEFKPLVEEPQNLIKQNCLEFE  
 QLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKHPEAKRMPAEDYLSVVLNQLCVLHEK  
 TPVSDRVTKCTESLVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKERQIKKQTLVELVKHK  
 PKATKEQLKAVMDDFAAFVEKCKADDKETCF AE EGKLVAAASQAALGL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3074\\_b01.zip](https://cdn.origene.com/chromatograms/mg3074_b01.zip)  
**Restriction Sites:** SgfI-MluI  
**Cloning Scheme:**



**ACCN:** NM\_000477

**ORF Size:** 1827 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](mailto: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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_000477.7](#)

**RefSeq Size:** 2215 bp

**RefSeq ORF:** 1830 bp

**Locus ID:** 213

**UniProt ID:** [P02768](#)

**Cytogenetics:** 4q13.3

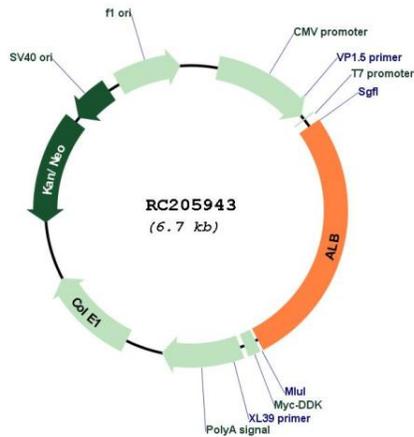
**Domains:** ALBUMIN

**Protein Families:** Secreted Protein

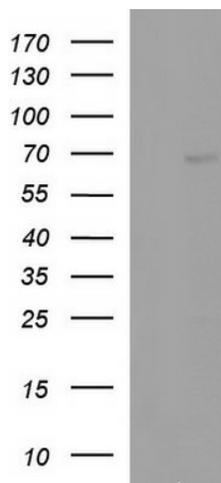
**MW:** 69.37 kDa

**Gene Summary:** This gene encodes the most abundant protein in human blood. This protein functions in the regulation of blood plasma colloid osmotic pressure and acts as a carrier protein for a wide range of endogenous molecules including hormones, fatty acids, and metabolites, as well as exogenous drugs. Additionally, this protein exhibits an esterase-like activity with broad substrate specificity. The encoded preproprotein is proteolytically processed to generate the mature protein. A peptide derived from this protein, EPI-X4, is an endogenous inhibitor of the CXCR4 chemokine receptor. [provided by RefSeq, Jul 2016]

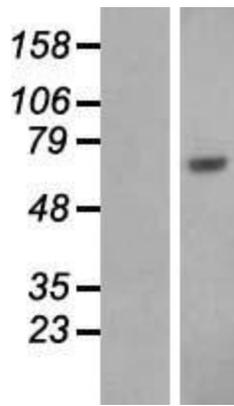
Product images:



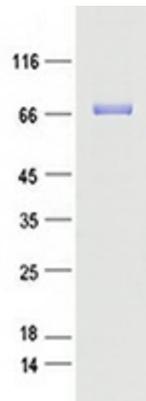
Circular map for RC205943



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ALB (Cat# RC205943, 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-ALB(Cat# [TA507290]). Positive lysates [LY424677] (100ug) and [LC424677] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424677]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205943 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ALB protein (Cat# [TP305943]). The protein was produced from HEK293T cells transfected with ALB cDNA clone (Cat# RC205943) using MegaTran 2.0 (Cat# [TT210002]).