

## Product datasheet for **RC217970**

### **RBP2 (NM\_004164) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RBP2 (NM\_004164) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RBP2  
**Synonyms:** CRABP-II; CRBP2; CRBP2I; RBPC2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC217970 representing NM\_004164  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACAAGGGACCAGAATGGAACCTGGGAGATGGAGAGTAATGAAAACCTTGAGGGCTACATGAAGGCC  
TGGATATTGATTTGCCACCCGCAAGATTGCAGTACGTCTCACTCAGACGAAGGTTATTGATCAAGATGG  
TGATAACTCAAGACAAAACCACTAGCACATCCGCAACTATGATGTGGATTTCACTGTTGGAGTAGAG  
TTTGACGAGTACACAAAGAGCCTGGATAACCGGCATGTTAAGGCACTGGTACCTGGGAAGGTGATGTCC  
TTGTGTGTGTGAAAAGGGGAGAAGGAGAACCGCGCTGGAAGCAGTGGATTGAGGGGACAAGCTGTA  
CCTGGAGCTGACCTGTGGTGACCAGGTGTGCCGTCAGTGTTCAAAAAGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217970 representing NM\_004164  
**Red**=Cloning site **Green**=Tags(s)

MTRDQNGTWEMESNENFEGYMKALDIDFATRKIAVRLTQTKVIDQDGNFKTKTSTFRNYDVDFTVGVE  
FDEYTKSLDNRHVKALVTWEGDVLVCVQKGEKENRGWKQWIEGDKLYLELTCGDQVCRQVFKKK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3422\\_a09.zip](https://cdn.origene.com/chromatograms/mg3422_a09.zip)

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_004164

**ORF Size:** 402 bp

**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.

**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\\_004164.3](#)

**RefSeq Size:** 700 bp

**RefSeq ORF:** 405 bp

Locus ID: 5948

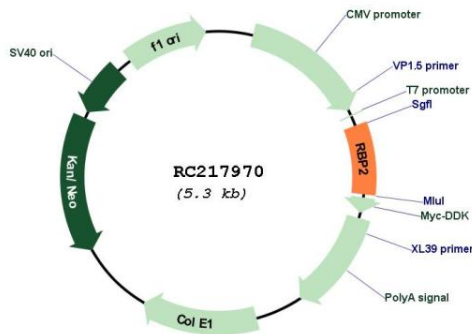
UniProt ID: [P50120](#)

Cytogenetics: 3q23

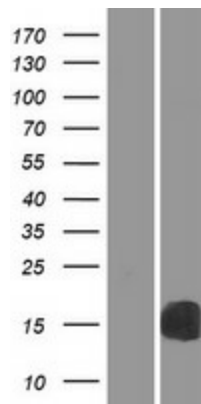
MW: 15.5 kDa

**Gene Summary:** This gene encodes an abundant protein present in the small intestinal epithelium. It is thought to participate in the uptake and/or intracellular metabolism of vitamin A. Vitamin A is a fat-soluble vitamin necessary for growth, reproduction, differentiation of epithelial tissues, and vision. This protein may also modulate the supply of retinoic acid to the nuclei of endometrial cells during the menstrual cycle. [provided by RefSeq, Aug 2015]

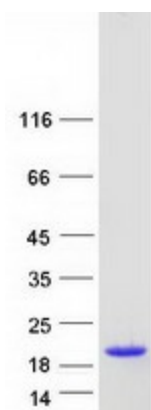
**Product images:**



Circular map for RC217970



Western blot validation of overexpression lysate (Cat# [LY418171]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217970 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RBP2 protein (Cat# [TP317970]). The protein was produced from HEK293T cells transfected with RBP2 cDNA clone (Cat# RC217970) using MegaTran 2.0 (Cat# [TT210002]).