

## Product datasheet for RC205935

### BIRC5 (NM\_001168) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** BIRC5 (NM\_001168) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** BIRC5  
**Synonyms:** API4; EPR-1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205935 representing NM\_001168  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGTGCCCCGACGTTGCCCCCTGCCTGGCAGCCCTTTCTCAAGGACCACCGCATCTCTACATTCAAGA  
 ACTGGCCCTTCTTGAGGGCTGCGCCTGCACCCGGAGCGGATGGCCGAGGCTGGCTTCATCCACTGCC  
 CACTGAGAACGAGCCAGACTTGGCCAGTGTTCCTTCTGCTTCAAGGAGCTGGAAGGCTGGGAGCCAGAT  
 GACGACCCATAGAGAACATAAAAAGCATTTCGTCGGTTGCGCTTTCCTTCTGTCAAGAAGCAGTTTG  
 AAGAATTAACCCTTGGTGAATTTTGAAGTGGACAGAGAAAGAGCCAAGAACAATTGCAAAGGAAAC  
 CAACAATAAGAAGAAAGAATTTGAGGAACTGCGAAGAAAGTGGCCGTGCCATCGAGCAGCTGGCTGCC  
 ATGGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205935 representing NM\_001168  
 Red=Cloning site Green=Tags(s)

MGAPTLPPAWQPFLKDHRI STFKNWPFLEGCACTERMAEAGFIHCPTENEPDLAQCFKFELEGWEPD  
 DDPIEEHKKHSSGCAFLSVKQKFEELTLGEFLKLDREKAKNKIAKETNNKKKEFEETAKKVRRAIEQLAA  
 MD

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2605\\_g01.zip](https://cdn.origene.com/chromatograms/mg2605_g01.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001168

**ORF Size:** 426 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\\_001168.1](#)

**RefSeq Size:** 2655 bp

**RefSeq ORF:** 429 bp

**Locus ID:** 332

**UniProt ID:** [O15392](#)

**Cytogenetics:** 17q25.3

**Domains:** BIR

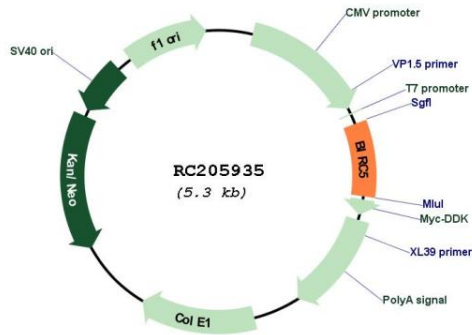
**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:** Colorectal cancer, Pathways in cancer

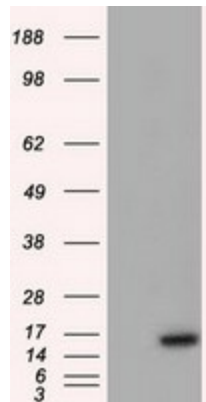
**MW:** 16.2 kDa

**Gene Summary:** This gene is a member of the inhibitor of apoptosis (IAP) gene family, which encode negative regulatory proteins that prevent apoptotic cell death. IAP family members usually contain multiple baculovirus IAP repeat (BIR) domains, but this gene encodes proteins with only a single BIR domain. The encoded proteins also lack a C-terminus RING finger domain. Gene expression is high during fetal development and in most tumors, yet low in adult tissues. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jun 2011]

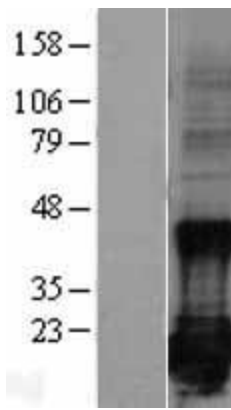
Product images:



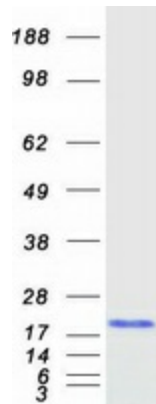
Circular map for RC205935



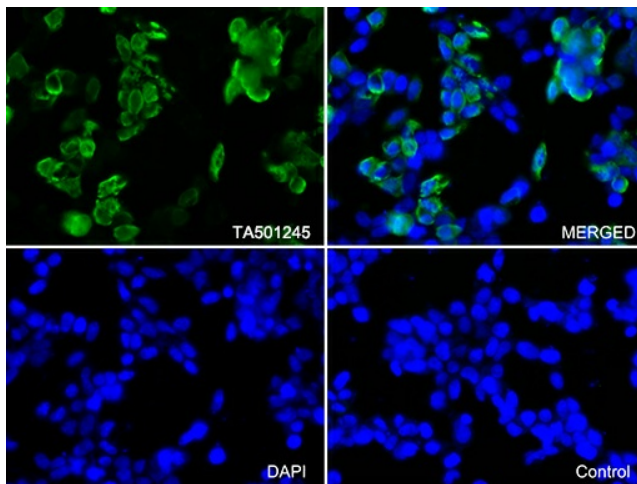
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BIRC5 (Cat# RC205935, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BIRC5 (Cat# [TA501245]). Positive lysates [LY400469] (100ug) and [LC400469] (20ug) can be purchased separately from OriGene.



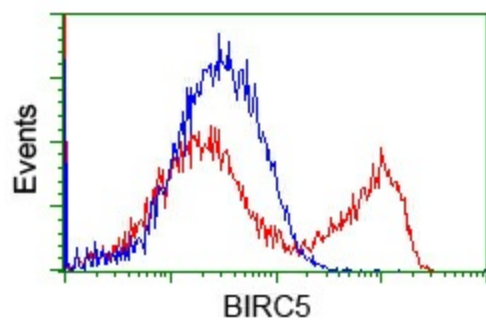
Western blot validation of overexpression lysate (Cat# [LY400469]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205935 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BIRC5 protein (Cat# [TP305935]). The protein was produced from HEK293T cells transfected with BIRC5 cDNA clone (Cat# RC205935) using MegaTran 2.0 (Cat# [TT210002]).



Immunofluorescent staining of 293T cells transfected by pCMV6-ENTRY BIRC5 (RC205935) using anti-BIRC5 antibody ([TA501245]/green, upper left; DAPI/blue, lower left; MERGED, upper right). 293T cells transfected with empty vector served as a negative control (MERGED, lower right) (1:100).



HEK293T cells transfected with either RC205935 overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-BIRC5 antibody ([TA501245]), and then analyzed by flow cytometry.