

## Product datasheet for **RC216879**

### **BRD4 (NM\_014299) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BRD4 (NM_014299) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BRD4
Synonyms:	CAP; HUNK1; HUNKI; MCAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC216879 representing NM\_014299  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCTGCGGAGAGCGGCCCTGGGACGAGATTGAGAAATCTGCCAGTAATGGGGATGGACTAGAACTT  
 CCCAAATGTCTACAACACAGGCCAGGCCAACCCAGCCAGCCAACGCAGCCAGCACCACCCCGCC  
 CCCAGAGACCTCCAACCCTAACAAAGCCCAAGAGGCAGACCAACCAACTGCAATACCTGCTCAGAGTGGT  
 CTCAAGACACTATGGAACACCAGTTTGCATGGCCTTCCAGCAGCCTGTGGATGCCGTCAGACTGAACC  
 TCCCTGATTACTATAAGATCATTAAAACGCCTATGGATATGGGAACAATAAAGAAGCGCTTGAAAAACA  
 CTATTACTGGAATGCTCAGGAATGTATCCAGGACTTCAACTATGTTTACAAATGTTACATCTACAAC  
 AAGCCTGGAGATGACATAGTCTTAATGGCAGAAGCTCTGAAAAGCTCTTCTGCAAAAAATAAATGAGC  
 TACCCACAGAAGAAACCGAGATCATGATAGTCCAGGCAAAAGGAAGAGGACGTGGGAGGAAAGAAACAGG  
 GACAGCAAAACCTGGCGTTTCCACGGTACCAACACAACCTCAAGCATCGACTCCTCCGAGACCCAGACC  
 CCTCAGCCGAATCCTCCTCCTGTGCAGGCCACGCCTCACCCCTCCTCGCGTACCCCGGACCTCATCG  
 TCCAGACCCCTGTGATGACAGTGGTGCCTCCCCAGCCACTGCAGACGCCCCCGCCAGTGGCCCCCAGCC  
 ACAACCCCAACCCGCTCCAGTCCCCAGCCGTACAGAGCCACCCACCCATCATCGCGGCCACCCACAG  
 CCTGTGAAGACAAAGAAGGGAGTGAAGAGGAAAGCAGACACCACCACCCACCCATTGACCCATTC  
 ACGAGCCACCCCTCGTGCCCGGAGCCCAAGACCACCAAGCTGGGCCAGCGCGGGAGAGCAGCCGGCC  
 TGTGAAACCTCCAAGAAGGACGTGCCCGACTCTCAGCAGCACCAGCACCAGAGAAGAGCAGCAAGGTC  
 TCGGAGCAGCTCAAGTCTGCAGCGCATCCTCAAGGAGATGTTTGCCAAGAAGCAGCCCGCCTACGCT  
 GGCCCTTCTACAAGCCTGTGGACTGGAGGCACTGGGCCTACAGACTACTGTGACATCATCAAGCACCC  
 CATGGACATGAGCACAATCAAGTCTAAACTGGAGGCCGTGAGTACCGTGTGCTCAGGAGTTTGGTGCT  
 GACGTCGGATTGATGTTCTCAACTGCTATAAGTACAACCCTCCTGACCATGAGGTGGTGGCCATGGCCC  
 GCAAGCTCCAGGATGTGTTGCAATGCGCTTTGCCAAGATGCCGGACGAGCCTGAGGAGCCAGTGGTGGC  
 CGTGTCTCCCGGAGTGGCCCTCCACCAAGGTTGTGGCCCCGCTCATCCAGCGACAGCAGCAGC  
 GATAGCTCCTCGGACAGTGACAGTTCGACTGATGACTCTGAGGAGGAGCGAGCCAGCGGCTGGCTGAGC  
 TCCAGGAGCAGCTCAAAGCCGTGCAGGAGCAGCTTGCAGCCCTCTCAGCCCCAGCAGAACAACCAAA  
 GAAAAAGGAGAAAGACAAGAAGGAAAAGAAAAAGCAAAAAGGAAAGAGGAAGTGAAGAGAAT  
 AAAAAAGCAAAGCCAAGGAACCTCCTCTAAAAAGACGAAGAAAAATAATAGCAGCAACAGCAATGTGA  
 GCAAGAAGGAGCCAGCGCCATGAAGAGCAAGCCCTCCACGTATGAGTCGGAGGAAGAGGACAAGTG  
 CAAGCCTATGTCCTATGAGGAGAAGCGGACGCTCAGCTTGGACATCAACAAGCTCCCGGCGAGAAGCTG  
 GGCCGCGTGGTGACATCATCCAGTACGGGAGCCCTCCTGAAGAATCCAACCCGACGAGATTGAAA  
 TCGACTTTGAGACCCTGAAGCCGTCCACTGCGTGAGCTGGAGCGCTATGTCACCTCCTGTTTGGGAA  
 GAAAAGGAAACCTCAAGCTGAGAAAGTTGATGTGATTGCCGGCTCCTCCAAGATGAAGGGCTTCTCGTCC  
 TCAGAGTCGGAGAGCTCCAGTGAAGTCCAGCTCCTGACAGCGAAGACTCCGAAACAGGTCTCTGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC216879 representing NM\_014299  
 Red=Cloning site Green=Tags(s)

MSAESGPGTRLRNLVPMGDGLETSMSTTQAQAQPANAASTNPPPETSNPNKPKRQTNLQYLLRVV  
 LKTLWKHQFAWPFQQPVDAVKLNLPDYKIIKTPMDMGTIKKRLNNYYWNAQECIQDFNTMFTNCYIYN  
 KPGDDIVLMAEAEKFLQKINELPTEETEIMIVQAKGRGRKGTAKPGVSTVPNTTQASTPPQTQT  
 PQPNPPVQATPHFPFPAVTPDLIVQTPVMTVVPQPLQTPPPVPPQPPPPAPAPQPVQSHPPPIAATPQ  
 PVKTKKGVKRKADTTTPTTIDPIHEPPSLPPEPKTTKLGQRRESSRPVKPPKDVPSQQHPAPEKSSKV  
 SEQLKCCSGILKEMFAKHAAYAWPFYKPDVEALGLHDYCDIIKHPMDMSTIKSKLEAREYRDAQEFGA  
 DVRLMFSNCYKYNPPDHEVVAMARKLQDVFEMRFKMPDEPEEPVAVSSPAVPPPTKVVAPPSSSDSSS  
 DSSSDSDSSTDDSEEERAQLAELQEQLKAVHEQLAALSQPQNKPKKKEKDKKKEKKEKHKRKEEVEEN  
 KKSKAKEPPPKTKKNNSSNSNVSKKEPAPMKSPPPTYESEEDKCKPMSYEEKRQLSLDINKLPGEKL  
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 SESESSSESSSDSEDSETGPA

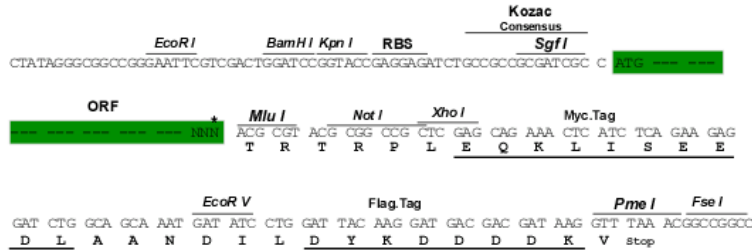
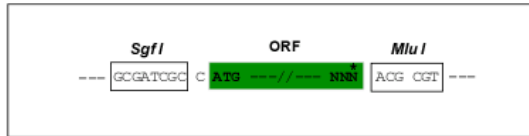
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4221\\_e10.zip](https://cdn.origene.com/chromatograms/mg4221_e10.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

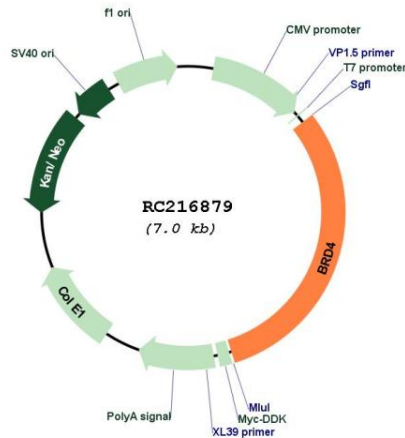
**ACCN:** NM\_014299

**ORF Size:** 2166 bp

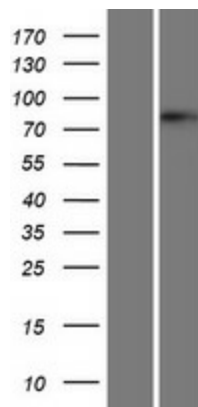
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_014299.2</a>
<b>RefSeq Size:</b>	3149 bp
<b>RefSeq ORF:</b>	2169 bp
<b>Locus ID:</b>	23476
<b>UniProt ID:</b>	<a href="#">O60885</a>
<b>Cytogenetics:</b>	19p13.12
<b>Protein Families:</b>	Protein Kinase
<b>MW:</b>	80.3 kDa

**Gene Summary:**

The protein encoded by this gene is homologous to the murine protein MCAP, which associates with chromosomes during mitosis, and to the human RING3 protein, a serine/threonine kinase. Each of these proteins contains two bromodomains, a conserved sequence motif which may be involved in chromatin targeting. This gene has been implicated as the chromosome 19 target of translocation t(15;19)(q13;p13.1), which defines an upper respiratory tract carcinoma in young people. Two alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008]

**Product images:**


Circular map for RC216879



Western blot validation of overexpression lysate (Cat# [LY415375]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216879 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).