

## Product datasheet for **RR206088**

### Bcdin3d (NM\_001108751) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Bcdin3d (NM\_001108751) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Bcdin3d  
**Synonyms:** RGD1306433  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR206088 representing NM\_001108751  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCGGCAACCCAGGAATTGTCCAAAGGGGGCGTTGAAGAGGCTGTGGAGGAAGACGCCCGCAGCTT  
TGAAGCCTGGGGCCGCGCGTTCGAAAATTTCCCTCATTATCCCGCTTCCACCCTCCGAGCAAAGGCT  
CCGCCTTCTGCCCGGAGCTTCTCGACAGCTTCCCTCCCGAGGGTCCCGAGAGGAGGCCGATCCTA  
GGGCTCGACGTGGGGTGTAACTCCGGGATCTGAGCATGGCTCTGTATAAACATTTCTTTCCCGCATG  
ATGGGGAGACCAGCTCCGGCACTTCCAGAGAACTCCGCCTCCTCTGCTGTGATATAGATCCAGTCCCTTGT  
GGAGCGGGCTGAAAATGGCTGTCGCTTTCTGATGCCTTGACCTTTATCACCTGGACATCATGGATCAA  
GAGAGCAGGAAGGTTCCCTTGAGTTCTTCTTAAGCCAGTTTGGGCGTTCGGTTTTGACATTGTCTTCT  
GCATGTCAGTAACCATGTGGATTCACCTGAACCATGGAGACCGTGGTCTGTGCGAGTTCCTGGCCACGT  
CTCCTCTCTGACGCTACCTCCTCGTGGAGCCACAGCCCTGGAAGTGTACCGGCAGCCGCAAGACGC  
CTACGCAAGCTGGGACTCCACAATTTGATCACTTCCGCTCCCTGGCCATCCGAGGTGACATGGCCAGCC  
AGATCGTGCGAATCTTGACGCAGGACCAGGGATGGAGTTAGCATGCTGTTTTGGCAACACCAAGTTGGGA  
CCGAAGCCTTCTTCTTTCAGAGCAAAGCACACCGAGGAGACTCAGGCAATCCCTGAATCGTCAACCAAA  
GAGACAGGGACGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR206088 representing NM\_001108751  
Red=Cloning site Green=Tags(s)

MAATQELSKGGVEEAVEEDDPAALKPGAAPFGNFPHYSRFHPPEQRLRLLPPELLRQLFPPEGPERRPIL  
 GLDVGCNSGDL SMALYKHFLSPHDGETSSGTSRELRLCCDIDPVL VERAENGCRFPDALTFITLDIMDQ  
 ESRKVPLSSFLSQFGRSVFDIVFCMSVTMWIHLNHGDRGLCEFLAHVSSLSYLLVEPQPWKCYRAAARR  
 LRKLG LHNFDHFRSLAIRGDMASQIVRILTQDHGMELACCFGNTSWDRSLLL FRAKHTEETQAIPESTK  
 ETGTD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

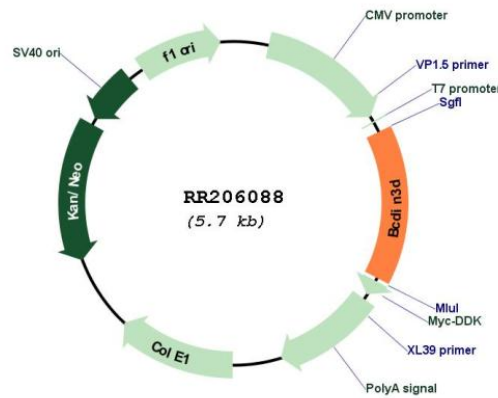
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001108751

**ORF Size:** 855 bp

<b>OTI Disclaimer:</b>	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>
<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>RefSeq:</b>	<a href="#">NM_001108751.1</a> , <a href="#">NP_001102221.1</a>
<b>RefSeq Size:</b>	1254 bp
<b>RefSeq ORF:</b>	858 bp
<b>Locus ID:</b>	363001
<b>UniProt ID:</b>	<a href="#">D4ABH7</a>
<b>Cytogenetics:</b>	7q36
<b>MW:</b>	32 kDa
<b>Gene Summary:</b>	O-methyltransferase that specifically monomethylates 5'-monophosphate of cytoplasmic histidyl tRNA, acting as a capping enzyme. Less efficiently, also methylates the 5' monophosphate of pre-miRNAs, acting as a negative regulator of miRNA processing. The 5' monophosphate of pre-miRNAs is recognized by DICER1 and is required for pre-miRNAs processing: methylation at this position reduces the processing of pre-miRNAs by DICER1. Able to mediate methylation of pre-miR-145, as well as other pre-miRNAs. There is some controversy about the methylation of pre-miR-145, since the dimethylation first described as the specific enzymatic activity cannot be reproduced by a more recent work which observes a monomehtylation of pre-miR-145 but two orders weaker than the methylation of cytosolic histidyl tRNA.[UniProtKB/Swiss-Prot Function]