

## **Product datasheet for RN206088**

## Bcdin3d (NM\_001108751) Rat Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Bcdin3d (NM\_001108751) Rat Untagged Clone

Tag: Tag Free
Symbol: Bcdin3d

Synonyms: RGD1306433

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >RN206088 representing NM\_001108751

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM\_001108751

**Insert Size:** 858 bp



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## Bcdin3d (NM\_001108751) Rat Untagged Clone - RN206088

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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.

RefSeq: <u>NM 001108751.1</u>, <u>NP 001102221.1</u>

RefSeq Size: 1254 bp
RefSeq ORF: 858 bp
Locus ID: 363001
UniProt ID: D4ABH7
Cytogenetics: 7q36

**Gene Summary:** 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]