

## **BCDIN3D Antibody (C-Term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22145b

# **Specification**

# **BCDIN3D Antibody (C-Term) - Product Information**

**Application** WB,E **Primary Accession** 07Z5W3 O5RFI3 Other Accession Reactivity Human Host **Rabbit** Clonality polyclonal Isotype Rabbit IgG Calculated MW 33200 Antigen Region 243-276

### **BCDIN3D Antibody (C-Term) - Additional Information**

#### Gene ID 144233

### **Other Names**

 $\label{lem:pre-mirans} Pre-mirans 5'-monophosphate\ methyltransferase,\ 2.1.1.-,\ BCDIN3\ domain-containing\ protein,\ BCDIN3D$ 

### Target/Specificity

This BCDIN3D antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 243-276 amino acids from human BCDIN3D.

### **Dilution**

WB~~1:1000-2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

BCDIN3D Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **BCDIN3D Antibody (C-Term) - Protein Information**

Name BCDIN3D (HGNC:27050)



**Function** O-methyltransferase that specifically monomethylates 5'- monophosphate of cytoplasmic histidyl tRNA (tRNA(His)), acting as a capping enzyme by protecting tRNA(His) from cleavage by DICER1 (PubMed:28119416, PubMed:31329584, PubMed:31919512). Also able, with less efficiently, to methylate the 5' monophosphate of a subset of pre- miRNAs, acting as a negative regulator of miRNA processing (PubMed:23063121, PubMed:28119416). 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 (PubMed:23063121). Was also reported to mediate dimethylation of pre-miR-145; however dimethylation cannot be reproduced by another group which observes a monomethylation of pre-miR-145 (PubMed:23063121, PubMed:28119416).

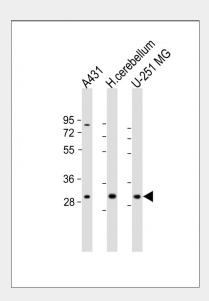
**Cellular Location** Cytoplasm.

### **BCDIN3D Antibody (C-Term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **BCDIN3D Antibody (C-Term) - Images**



All lanes: Anti-BCDIN3D Antibody (C-Term) at 1:1000-2000 dilution Lane 1: A431 whole cell lysate Lane 2: human cerebellum lysate Lane 3: U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# **BCDIN3D Antibody (C-Term) - Background**

O-methyltransferase that specifically dimethylates the 5' monophosphate of pre-miRNAs, acting as





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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.

# **BCDIN3D Antibody (C-Term) - References**

Ota T., et al. Nat. Genet. 36:40-45(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Xhemalce B., et al. Cell 151:278-288(2012).