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BCDIN3D Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22145b

Product Information

Application	WB, E
Primary Accession	Q7Z5W3
Other Accession	Q5RFI3
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56214
Calculated MW	33200

Additional Information

Gene ID	144233
Other Names	Pre-miRNA 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.

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.

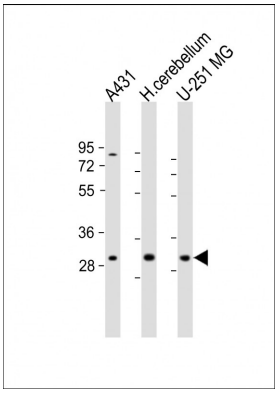
Background

O-methyltransferase that specifically dimethylates 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.

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.