

BCDIN3D Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP22145b

Product Information

Application	WB, E
Primary Accession	Q7Z5W3
Other Accession	Q5RFI3
Reactivity	Human
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

methylyate 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.

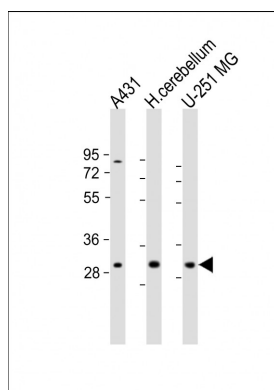
References

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'.