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Dcr-1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1961c

Product Information

Application	WB, E
Primary Accession	P34529
Reactivity	C.Elegans
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB9834
Calculated MW	218423
Antigen Region	1068-1097

Additional Information

Gene ID	176138
Other Names	Endoribonuclease dcr-1, 3126-, dcr-1
Target/Specificity	This Dcr-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1068-1097 amino acids of CAEEL Dcr-1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	Dcr-1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	dcr-1 {ECO:0000303|PubMed:11641272, ECO:0000312|WormBase:K12H4.8}
Function	Component of the ERI/DICER complex which is involved in processing amplified double-stranded RNA (dsRNA) intermediates during small-RNA-mediated gene-silencing or RNA interference (RNAi) (Probable). Involved in cleaving dsRNA in the RNAi pathway (PubMed:11641272, PubMed:20223951). It produces 21 to 23 bp dsRNAs (siRNAs) which target the selective destruction of homologous RNAs (PubMed:11641272,

PubMed:20223951). Seems to process the precursor of the small temporal RNA let-7 which is involved in developmental timing (PubMed:11641272). Required for avoidance behavior induced by small RNAs derived from pathogenic bacteria such as P.aeruginosa (PubMed:32908307). Involved in innate immunity through its role in small RNA processing.

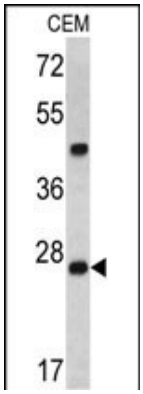
Background

The Dcr-1 gene encodes a bidentate ribonuclease that is homologous to E. coli RNAse III. Dcr-1 is required both for RNA interference and for synthesis of small developmental RNAs. Dcr-1 interacts in vivo with RDE-4, a double-stranded RNA (dsRNA) binding protein required for RNAi that interacts with trigger dsRNAs and may function to deliver dsRNAs to Dcr-1 for endonucleolytic processing.

References

Duchaine TF, et al. 2006. Cell 124:343-354.
Denli AM, et al. 2004. Nature 432:231-235.
Tabara H, et al. 2002. Cell 109:861-871.
Grishok A, et al. 2001. Cell 106:23-34.
Knight SW, et al. 2001. Science 293:2269-2271.

Images



Western blot analysis of Dcr-1 antibody (Center) (Cat. #AP1961c) in CEM cell line lysates (35ug/lane). Dcr-1 (arrow) was detected using the purified Pab.

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