

## Dcr-1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP1961c

### Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P34529</a>
<b>Reactivity</b>	C.Elegans
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB9834
<b>Calculated MW</b>	218423
<b>Antigen Region</b>	1068-1097

### Additional Information

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<b>Gene ID</b>	176138
<b>Other Names</b>	Endoribonuclease dcr-1, 3126-, dcr-1
<b>Target/Specificity</b>	This Dcr-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1068-1097 amino acids of CAEEL Dcr-1.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	Dcr-1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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<b>Name</b>	dcr-1 {ECO:0000303   PubMed:11641272, ECO:0000312   WormBase:K12H4.8}
<b>Function</b>	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: <a href="#">11641272</a> , PubMed: <a href="#">20223951</a> ). It produces 21 to 23 bp dsRNAs (siRNAs) which target the selective destruction of homologous RNAs (PubMed: <a href="#">11641272</a> ,

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

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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.

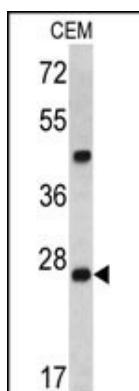
## References

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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

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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'.