

RNA

A PUBLICATION OF THE RNA SOCIETY

VOL. 31, NO. 1



JANUARY 2025

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Cover Illustration: Structure of the helicase and C-terminal domains of Dicer-related helicase-1 (DRH-1) bound to dsRNA (PDB id: 8T5S; Consalvo CD, Aderounmu AM, Donelick HM, Aruscavage PJ, Eckert DM, Shen PS, Bass BL. 2024. Caenorhabditis elegans Dicer acts with the RIG-I-like helicase DRH-1 and RDE-4 to cleave dsRNA. eLife 13: RP93979). Cryo-EM structures of Dicer-1 in complex with DRH-1, RNAi deficient-4 (RDE-4), and dsRNA provide mechanistic insights into how these three proteins cooperate in antiviral defense. The dsRNA backbone is depicted by green and red ribbons. The U-A pairs of the poly(A)·poly(U) model are shown as long rectangular cyan blocks, with minor-groove edges colored white. The ADP ligand is represented by a red block and the protein by a gold ribbon. Cover image provided by X3DNA-DSSR, an NIGMS National Resource for structural bioinformatics of nucleic acids (R24GM153869; skmatics.x3dna.org). Image generated using DSSR and PyMOL (Lu XJ. 2020. Nucleic Acids Res 48: e74).

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