Resource Summary Report

Generated by RRID on Sep 10, 2026

NUPACK

RRID:SCR_022274
Type: Tool

Proper Citation

NUPACK (RRID:SCR_022274)

Resource Information

URL: http://www.nupack.org/

Proper Citation: NUPACK (RRID:SCR_022274)

Description: Web server for analysis and design of nucleic acid systems. Enables thermodynamic analysis of dilute solutions of interacting nucleic acid strands. Analysis and design of nucleic acid secondary structure for systems involving one or more species of interacting strands.

Synonyms: Nucleic Acid Package

Resource Type: data access protocol, software resource, web service

Defining Citation: PMID:20645303

Keywords: nucleic acid secondary structure analysis and design, nucleic acid strands dilute solutions, interacting nucleic acid strands, nucleic acid strands, thermodynamic analysis,

Availability: Free, Freely available

Resource Name: NUPACK

Resource ID: SCR_022274

Record Creation Time: 20220511T050132+0000

Record Last Update: 20260905T133012+0000

Ratings and Alerts

No rating or validation information has been found for NUPACK.

No alerts have been found for NUPACK.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 58 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Zhang Y, et al. (2026) TSHR-Targeting Nucleic Acid Aptamer Treats Graves' Ophthalmopathy via Novel Allosteric Inhibition. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(4), e05586.

Fornace ME, et al. (2026) NUPACK: Computational Nucleic Acid Analysis and Design. ACS synthetic biology, 15(4), 1426.

Hu T, et al. (2026) Amplification-Free Detection of Highly Structured RNA Molecules Using SCas12aV2. Bio-protocol, 16(12), e5462.

Spezzani E, et al. (2026) MARPLE: A Proximity-Triggered CRISPR-Cas13 Platform for Ultrasensitive Antibody Detection. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(13), e17799.

Lee S, et al. (2026) Kinetic Traps in RNA Folding: Targeted Design of Frameshifting Element Mutants by Thermodynamic and Kinetic Analysis of the Chikungunya Virus. The journal of physical chemistry. B, 130(6), 1810.

O'Hanlon R, et al. (2026) Visualizing Diverse RNA Functions in Living Cells With SpinachTM Family of Fluorogenic Aptamers. Bio-protocol, 16(12), e5504.

Emura S, et al. (2026) Background-Free Nanopore Decoding of microRNA Expression Patterns Using Circular Diagnostic DNA. Analytical chemistry, 98(3), 2080.

Lee E, et al. (2026) Development of a LAMP assay using hybridization-based TaqMan-style probes (HyTaq) for simultaneous detection of wild-type and macrolide-resistant Mycoplasma pneumoniae. Journal of clinical microbiology, 64(1), e0129125.

Liu W, et al. (2025) Y-shaped DNA as a dynamic self-assembly nanomaterial for phenotype-specific regulation of stem cell differentiation on the gene level. Regenerative biomaterials, 12, rbaf043.

Wang R, et al. (2025) How large is the universe of RNA-like motifs? A clustering analysis of RNA graph motifs using topological descriptors. PLoS computational biology, 21(7), e1013230.

Xu X, et al. (2025) CRISPR/Cas13X-assisted programmable and multiplexed translation regulation for controlled biosynthesis. Nucleic acids research, 53(1).

Nakashima KK, et al. (2025) Differential stability and dynamics of DNA-based and RNA-based coacervates affect non-enzymatic RNA chemistry. Nature communications, 16(1),

9296.

Garcia-Guerra A, et al. (2025) Tissue-specific modulation of CRISPR activity by miRNA-sensing guide RNAs. Nucleic acids research, 53(2).

Sleath H, et al. (2025) Haptotactic Motion of Multivalent Vesicles Along Ligand-Density Gradients. Langmuir : the ACS journal of surfaces and colloids, 41(18), 11474.

Zhang A, et al. (2025) A rapid and visual dual LAMP-LFD assay for on-site simultaneous detection of influenza A virus (H1N1) and respiratory syncytial virus (RSV). Frontiers in microbiology, 16, 1678396.

Zhao Z, et al. (2025) Structure-enhanced deep learning accelerates aptamer selection for small molecule families like steroids. Briefings in bioinformatics, 26(6).

Cabello-Garcia J, et al. (2025) Information propagation through enzyme-free catalytic templating of DNA dimerization with weak product inhibition. Nature chemistry, 17(8), 1179.

Wang R, et al. (2025) How Large is the Universe of RNA-Like Motifs? A Clustering Analysis of RNA Graph Motifs Using Topological Descriptors. ArXiv.

Liu Q, et al. (2025) Mirror-synchronized asymmetric CRISPR nanoswitch for single-molecule profiling of multiple circRNAs in different stages of breast cancer. Nucleic acids research, 53(20).

Liu M, et al. (2024) Fluorogenic Aptamer-Based Hybridization Chain Reaction for Signal-Amplified Imaging of Apurinic/Apyrimidinic Endonuclease 1 in Living Cells. Biosensors, 14(6).