

NucleoSpin® RNA, 740955.10/.50/.250

May 2025

Latest publications from 2023 and 2024 on NucleoSpin® RNA

Title	Journal	IF	Downstream application
Preclinical models for prediction of immunotherapy outcomes and immune evasion mechanisms in genetically heterogeneous multiple myeloma.	Nature Medicine	87,2	qRT-PCR
A druggable copper-signalling pathway that drives inflammation.	Nature	64,8	RNA-seq
Resistance of HNSCC cell models to pan-FGFR inhibition depends on the EMT phenotype associating with clinical outcome.	Molecular Cancer	41,4	RNA-seq
The therapeutically actionable long non-coding RNA 'T-RECS' is essential to cancer cells' survival in NRAS/MAPK-driven melanoma.	Molecular Cancer	41,4	qRT-PCR
Dermal macrophages set pain sensitivity by modulating the amount of tissue NGF through an SNX25-Nrf2 pathway.	Nature Immunology	31,2	Microarray, qRT-PCR
Optimization of the proliferation and persistency of CAR T cells derived from human induced pluripotent stem cells.	Nature Biomedical Engineering	29,3	Whole transcriptome sequencing
Colorectal Cancer Organoid-Stroma Biobank Allows Subtype-Specific Assessment of Individualized Therapy Responses.	Cancer Discovery	28,2	RNA-seq
Therapeutic activity of GARP:TGF-β1 blockade in murine primary myelofibrosis.	Blood	20,3	RNA-seq
Polymorphism in interferon alpha/beta receptor contributes to glucocorticoid response and outcome of ARDS and COVID-19.	Critical Care (London, England)	19,3	RNA-seq
Modulation of Dendritic Cell Function via Nanoparticle-Induced Cytosolic Calcium Changes.	Acs Nano	17,1	RNA-seq
Cytosolic Ptpb2 modulates axon growth in motoneurons through axonal localization and translation of Hnrnp.	Nature Communications	16,6	qRT-PCR, RNA pulldown assay, RNA immunoprecipitation
Reversible transitions between noradrenergic and mesenchymal tumor identities define cell plasticity in neuroblastoma.	Nature Communications	16,6	RNA-seq
Leukemia relapse via genetic immune escape after allogeneic hematopoietic cell transplantation.	Nature Communications	16,6	RNA-seq
Diversity of the Pacific Ocean coral reef microbiome.	Nature Communications	16,6	qRT-PCR
Mechanistic characterization of a Drosophila model of paraneoplastic nephrotic syndrome.	Nature Communications	16,6	qRT-PCR
T-cell stimulating vaccines empower CD3 bispecific antibody therapy in solid tumors.	Nature Communications	16,6	



RHBDL4-triggered downregulation of COPII adaptor protein TMED7 suppresses TLR4-mediated inflammatory signaling.	Nature Communications	16,6	qRT-PCR
Plasticity-induced repression of Irf6 underlies acquired resistance to cancer immunotherapy in pancreatic ductal adenocarcinoma.	Nature Communications	16,6	qRT-PCR
A ubiquitin-based effector-to-inhibitor switch coordinates early brain, craniofacial, and skin development.	Nature Communications	16,6	qRT-PCR
SNUPN deficiency causes a recessive muscular dystrophy due to RNA mis-splicing and ECM dysregulation.	Nature Communications	16,6	qRT-PCR
PAX4 loss of function increases diabetes risk by altering human pancreatic endocrine cell development.	Nature Communications	16,6	qRT-PCR
N-acetylneuraminic acid links immune exhaustion and accelerated memory deficit in diet-induced obese Alzheimer's disease mouse model.	Nature Communications	16,6	RNA-seq
Cellular reprogramming in vivo initiated by SOX4 pioneer factor activity.	Nature Communications	16,6	qRT-PCR
Mtf1 ablation enhances mitochondrial respiration and protects against hepatic steatosis.	Nature Communications	16,6	RNA-seq, qRT-PCR
Non-invasive assessment of normal and impaired iron homeostasis in the brain.	Nature Communications	16,6	RNA-seq
Intratumoral androgen biosynthesis associated with 3β-hydroxysteroid dehydrogenase 1 promotes resistance to radiotherapy in prostate cancer.	The Journal of Clinical Investigation	15,9	RNA-seq
SF3B1 mutation and ATM deletion codrive leukemogenesis via centromeric R-loop dysregulation.	The Journal of Clinical Investigation	15,9	RNA-seq
Neutrophil CEACAM1 determines susceptibility to NETosis by regulating the S1PR2/S1PR3 axis in liver transplantation.	The Journal of Clinical Investigation	15,9	qRT-PCR
Deficiency for SAMHD1 activates MDA5 in a cGAS/STING-dependent manner.	The Journal of Experimental Medicine	15,3	qRT-PCR
PPARγ Acetylation Orchestrates Adipose Plasticity and Metabolic Rhythms.	Advanced Science (Weinheim, Baden-Wurttemberg, Germany)	15,1	
Highly Mimetic Ex Vivo Lung-Cancer Spheroid-Based Physiological Model for Clinical Precision Therapeutics.	Advanced Science (Weinheim, Baden-Wurttemberg, Germany)	15,1	
LncRNA ARG1 Contributes to Virus-Induced Pancreatic β Cell Inflammation Through Transcriptional Activation of IFN-Stimulated Genes.	Advanced Science (Weinheim, Baden-Wurttemberg, Germany)	15,1	
Surveillance of 3' mRNA cleavage during transcription termination requires CF IB/Hrp1.	Nucleic Acids Research	14,9	RNA-seq



Precise homology-directed installation of large genomic edits in human cells with cleaving and nicking high-specificity Cas9 variants.	Nucleic Acids Research	14,9	qRT-PCR
Enhancer-promoter interactions can form independently of genomic distance and be functional across TAD boundaries.	Nucleic Acids Research	14,9	qRT-PCR
Biochemical and cellular insights into the Baz2B protein, a non-catalytic subunit of the chromatin remodeling complex.	Nucleic Acids Research	14,9	qRT-PCR
The THO complex counteracts TERRA R-loop-mediated telomere fragility in telomerase+ cells and telomeric recombination in ALT+ cells.	Nucleic Acids Research	14,9	qRT-PCR
Boosting NAD preferentially blunts Th17 inflammation via arginine biosynthesis and redox control in healthy and psoriasis subjects.	Cell Reports. Medicine	14,3	qRT-PCR
A progeroid syndrome caused by a deep intronic variant in TAPT1 is revealed by RNA/SI-NET sequencing.	Embo Molecular Medicine	14	qRT-PCR
Tryptophan depletion sensitizes the AHR pathway by increasing AHR expression and GCN2/LAT1-mediated kynurenine uptake, and potentiates induction of regulatory T lymphocytes.	Journal for Immunotherapy of Cancer	13,7	qRT-PCR
Treg-selective IL-2 starvation synergizes with CD40 activation to sustain durable responses in lymphoma models.	Journal for Immunotherapy of Cancer	13,7	qRT-PCR
Synthetic enforcement of STING signaling in cancer cells appropriates the immune microenvironment for checkpoint inhibitor therapy.	Science Advances	13,6	qRT-PCR
IGFBP2 secretion by mammary adipocytes limits breast cancer invasion.	Science Advances	13,6	qRT-PCR
Mitochondrial ACSS1-K635 acetylation knock-in mice exhibit altered metabolism, cell senescence, and nonalcoholic fatty liver disease.	Science Advances	13,6	RNA-seq
Targeting ABCA12-controlled ceramide homeostasis inhibits breast cancer stem cell function and chemoresistance.	Science Advances	13,6	
Therapeutic blockade of ER stress and inflammation prevents NASH and progression to HCC.	Science Advances	13,6	
TNIK is a conserved regulator of glucose and lipid metabolism in obesity.	Science Advances	13,6	
Chromosome 8p engineering reveals increased metastatic potential targetable by patient-specific synthetic lethality in liver cancer.	Science Advances	13,6	
Genome-wide CRISPR screens define determinants of epithelial-mesenchymal transition mediated immune evasion by pancreatic cancer cells.	Science Advances	13,6	
Coinhibition of topoisomerase 1 and BRD4-mediated pause release selectively kills pancreatic cancer via readthrough transcription.	Science Advances	13,6	
Characterization of early psychosis patients carrying a genetic vulnerability to redox dysregulation: a computational analysis of mechanism-based gene expression profile in fibroblasts.	Molecular Psychiatry	13,4	



<u>Piezo1 expression in chondrocytes controls endochondral ossification and osteoarthritis development.</u>	Bone Research	12,7	qRT-PCR
<u>CK1δ and CK1ε Signaling Sustains Mitochondrial Metabolism and Cell Survival in Multiple Myeloma.</u>	Cancer Research	12,7	
<u>Elevated FSP1 protects KRAS-mutated cells from ferroptosis during tumor initiation.</u>	Cell Death and Differentiation	12,4	
<u>A noncanonical response to replication stress protects genome stability through ROS production, in an adaptive manner.</u>	Cell Death and Differentiation	12,4	
<u>Topical tissue nanotransfection of Prox1 is effective in the prophylactic management of lymphedema.</u>	Molecular Therapy. Nucleic Acids	12,4	
<u>Host metabolic benefits of prebiotic exopolysaccharides produced by <i>Leuconostoc mesenteroides</i>.</u>	Gut Microbes	12,2	
<u>LncRNA LITATS1 suppresses TGF-β-induced EMT and cancer cell plasticity by potentiating TβRI degradation.</u>	The Embo Journal	11,5	
<u>PDP1 is a key metabolic gatekeeper and modulator of drug resistance in FLT3-ITD-positive acute myeloid leukemia.</u>	Leukemia	11,4	
<u>The active free-living bathypelagic microbiome is largely dominated by rare surface taxa.</u>	Isme Communications	11,2	
<u>COVID-19 mRNA vaccine protects against SARS-CoV-2 Omicron BA.1 infection in diet-induced obese mice through boosting host innate antiviral responses.</u>	EbioMedicine	11,1	
<u>Targeting dual oncogenic machineries driven by TAL1 and PI3K-AKT pathways in T-cell acute lymphoblastic leukemia.</u>	Haematologica	11,1	
<u>The exosomal secretomes of mesenchymal stem cells extracted via 3D-printed lithium-doped calcium silicate scaffolds promote osteochondral regeneration.</u>	Materials Today. Bio	10,7	
<u>Directing cellular responses in a nanocomposite 3D matrix for tissue regeneration with nanoparticle-mediated drug delivery.</u>	Materials Today. Bio	10,7	
<u>Reciprocal crosstalk between Th17 and mesothelial cells promotes metastasis-associated adhesion of ovarian cancer cells.</u>	Clinical and Translational Medicine	10,6	



Management System
EN ISO 13485:2016
ISO 9001:2015



www.tuv.com
ID 0000056401