

Southeast Asia RNAi Technology Market: Current Analysis and Forecast (2025-2033)

<https://marketpublishers.com/r/S5D7137620DCEN.html>

Date: February 2026

Pages: 110

Price: US\$ 3,999.00 (Single User License)

ID: S5D7137620DCEN

Abstracts

RNAi technology is a gene-silencing technology that allows precise control of gene activity using short interfering RNAs or similar molecules. It is a common technique in biomedical and pharmaceutical research, as well as in the development of targeted therapeutics.

The Southeast Asian RNAi Technology market is expected to exhibit a growth rate of 16.25% during the forecast period (2025-2033F). The market expansion is fueled by the increased investment in life sciences R&D, expanding genomics and precision medicine programs, and rising demand for efficient target validation tools. RNAi is being adopted in research and discovery processes due to government subsidies, academic-industrial partnerships, the need to shorten drug development cycles, and coherent research and development. Also, advances in RNA delivery technologies and increased validation in gene-silencing therapeutics are driving long-term commercial interest in the field. For example, on December 1, 2025, Precision Health Research, Singapore (PRECISE) announced a landmark partnership with companies Alnylam, Bayer, Boehringer Ingelheim, and Novo Nordisk, under Phase II of Singapore's National Precision Medicine (NPM) programme. This pioneering initiative marks Singapore as the first country in Asia to establish a pre-competitive collaboration with leading pharmaceutical companies, contributing to a vibrant precision health ecosystem and reaffirming Singapore as a leading hub for precision medicine innovation in Asia.

Based on type, the market is segmented into siRNA (Short interfering RNA), shRNA (Short hairpin RNA), miRNA (microRNA), and others. Among these, the siRNA (Short interfering RNA) market held the largest share in 2024. This is mainly because it is clinically proven, commercial-ready, and can be delivered through established delivery systems. Its established track record in rare

diseases, oncology, and metabolic diseases enhances the level of confidence among pharma and biotech companies in Singapore-based innovation hubs. This directly drives increased demand for siRNA production, screening instruments, and translational research services in the region. For example, on October 2, 2025, Researchers from NUS Medicine developed a novel RNA-based therapy that could transform treatment for metabolic dysfunction-associated steatohepatitis (MASH), previously known as Non-alcoholic fatty liver disease (NAFLD), which affects approximately 25% of people worldwide, and up to 40% of adults in Singapore. The team created a tiny medicine made of lipid nanoparticles, fat-like particles that can safely deliver genetic drugs (siRNA) into liver cells. Once inside, the siRNA silences a gene called SPTLC2, which produces ceramides, a type of fat that drives liver fat build-up, inflammation, and fibrosis when the levels are elevated.

Based on the application, the market is segmented into therapeutics, drug discovery & development, functional genomics, and others. Among these, the functional genomics segment is expected to grow at a significant CAGR during the forecast period (2025-2033). Functional genomics accelerates RNAi adoption by making it a key tool for target validation and gene functional studies in early research. The growing research center and government-sponsored genomic initiatives in Southeast Asia have heavily depended on RNAi-based knockdown experiments (particularly, shRNA and siRNA). This supports repeated demand for RNAi reagents, libraries, and custom services and helps to sustain continuous market growth.

Based on the end-user, the market is segmented into pharmaceutical & biotechnology companies, academic & research institutes, contract development & manufacturing organizations (CDMOs), and others. Among these, the pharmaceutical & biotechnology companies segment held the dominant share of the Southeast Asia RNAi Technology market in 2024. The pharmaceutical and biotechnology companies contribute to market growth by increasing investment in R&D, diversifying their pipelines, and outsourcing RNAi-based discovery efforts. These companies in Southeast Asia are increasingly using RNAi to de-risk drug targets before clinical investment, thereby enhancing development efficiency. Their inclination toward scalable, validated RNAi systems enhances long-term commercial adoption across the value chain. For example, on April 23, 2025, GenScript Biotech Corporation, a global leader in biotechnology research services, and NSG Bio, Singapore's premier biotech incubator, announced a strategic partnership designed to accelerate innovation and growth

within the biotechnology sector. Through this partnership, GenScript will provide exclusive preferential rates along with technical guidance from experienced scientists across its extensive range of biotechnology services and products to NSG Bio residents.

For a better understanding of the market adoption of the Southeast Asian RNAi Technology market, it is analyzed based on its regional presence in Southeast Asia, including Indonesia, Thailand, the Philippines, Vietnam, Malaysia, Singapore, and the Rest of Southeast Asia. Vietnam is expected to grow at a significant CAGR during the forecast period (2025-2033). This is propelled by booming pharmaceutical production, increased investment in life sciences, and biotech policy reforms. The growing demand for RNAi tools in functional genomics and drug discovery is driven by increased collaboration among universities, hospitals, and private research institutions. The rise in international partnerships and technology transfer, and government incentives for high-tech and biopharma R&D, drives the growth of the Vietnam Market.

Some major players running in the market include GenScript, Integrated DNA Technologies, Inc. (Danaher Corporation), Thermo Fisher Scientific Inc., Merck KGaA, QIAGEN, Revvity, (OligoX) ABT Biomedical Solutions Co., Ltd., Bio Basic Asia Pacific Pte Ltd., and others.

Contents

1 MARKET INTRODUCTION

- 1.1. Market Definitions
- 1.2. Main Objective
- 1.3. Stakeholders
- 1.4. Limitation

2 RESEARCH METHODOLOGY OR ASSUMPTIONS

- 2.1. Research Process of the Southeast Asia RNAi Technology Market
- 2.2. Research Methodology of the Southeast Asia RNAi Technology Market
- 2.3. Respondent Profile

3 EXECUTIVE SUMMARY

- 3.1. Industry Synopsis
- 3.2. Segmental Outlook
 - 3.2.1. Market Growth Intensity
- 3.3. Country Outlook

4 MARKET DYNAMICS

- 4.1. Drivers
- 4.2. Opportunity
- 4.3. Restraints
- 4.4. Trends
- 4.5. PESTEL Analysis
- 4.6. Demand Side Analysis
- 4.7. Supply Side Analysis
 - 4.7.1. Merger & Acquisition
 - 4.7.2. Investment Scenario
 - 4.7.3. Industry Insights: Leading Startups and Their Unique Strategies

5 PRICING ANALYSIS

- 5.1. Price Influencing Factors

6 SOUTHEAST ASIA RNAI TECHNOLOGY MARKET REVENUE (USD MN), 2023-2033F

7 MARKET INSIGHTS BY TYPE

- 7.1. siRNA (Short interfering RNA)
- 7.2. shRNA (Short hairpin RNA)
- 7.3. miRNA (microRNA)
- 7.4. Others

8 MARKET INSIGHTS BY APPLICATION

- 8.1. Therapeutics
- 8.2. Drug Discovery & Development
- 8.3. Functional Genomics
- 8.4. Others

9 MARKET INSIGHTS BY END-USER

- 9.1. Pharmaceutical & Biotechnology Companies
- 9.2. Academic & Research Institutes
- 9.3. Contract Development & Manufacturing Organizations (CDMOs)
- 9.4. Others

10 MARKET INSIGHTS BY COUNTRY

- 10.1. Indonesia
- 10.2. Thailand
- 10.3. Philippines
- 10.4. Vietnam
- 10.5. Malaysia
- 10.6. Singapore
- 10.7. Rest of Southeast Asia

11 VALUE CHAIN ANALYSIS

- 11.1. Marginal Analysis
- 11.2. List of Market Participants

12 COMPETITIVE LANDSCAPE

- 12.1. Competition Dashboard
- 12.2. Competitor Market Positioning Analysis
- 12.3. Porter Five Forces Analysis

13 COMPANY PROFILES

- 13.1. GenScript
 - 13.1.1. Company Overview
 - 13.1.2. Key Financials
 - 13.1.3. SWOT Analysis
 - 13.1.4. Product Portfolio
 - 13.1.5. Recent Developments
- 13.2. Integrated DNA Technologies, Inc. (Danaher Corporation)
- 13.3. Thermo Fisher Scientific Inc.
- 13.4. Merck KGaA
- 13.5. QIAGEN
- 13.6. Revvity
- 13.7. (OligoX) ABT Biomedical Solutions Co., Ltd.
- 13.8. Bio Basic Asia Pacific Pte Ltd.
- 13.9. XX
- 13.10. XX

14 ACRONYMS & ASSUMPTIONS

15 ANNEXURE

I would like to order

Product name: Southeast Asia RNAi Technology Market: Current Analysis and Forecast (2025-2033)

Product link: <https://marketpublishers.com/r/S5D7137620DCEN.html>

Price: US\$ 3,999.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S5D7137620DCEN.html>