

Molecular Diagnosis Solutions



Introducing Synbio Technologies' cutting-edge Molecular Diagnosis Solutions – a revolutionary service that harnesses the potential of nucleic acids and proteins as biomarkers to redefine disease diagnosis and treatment. Our state-of-the-art molecular diagnostics technology is at the forefront of this rapidly evolving field, meeting the ever-growing demand for high-quality diagnostic probe products.

As pioneers in the field, Synbio Technologies is committed to delivering exceptional solutions that drive advancements in scientific research and industries spanning from research and development to large-scale production. With our comprehensive offering of diagnostic probes, including FISH probes, qPCR probes, SNP probes, and an array of molecular diagnostic materials, we cater to diverse needs across the diagnostic spectrum.

Experience the transformative potential of Molecular Diagnosis with Synbio Technologies – your trusted partner in shaping the future of healthcare and diagnostics. Our dedication to quality, expertise in oligonucleotide synthesis, and proficiency in chemical modifications ensure that our diagnostic probe products consistently exceed expectations and contribute to cutting-edge breakthroughs in the field of molecular diagnostics.

Our Comprehensive Offerings:

- qPCR Probes
- FISH Probes
- SNP Probes
- Various molecular diagnostic materials

Quality Assurance:

All our diagnostic probes are synthesized in compliance with ISO 9001:2015 & ISO 13485:2016 quality management system standards, ensuring reliability and accuracy.

Expertise and Capabilities:

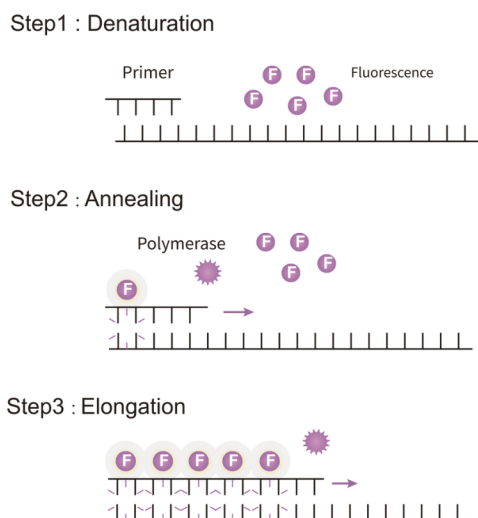
With almost 20 years of experience in oligonucleotide synthesis and a vast array of chemical modifications, fluorescence, and quenchers, we deliver a wide range of diagnostic probe products for molecular hybridization and PCR applications, including:

- TaqMan/MGB qPCR Probes
- Molecular Beacons
- Scorpions Probes
- LNA Probes
- Dual Quencher Probes
- RAA/RPA Probes

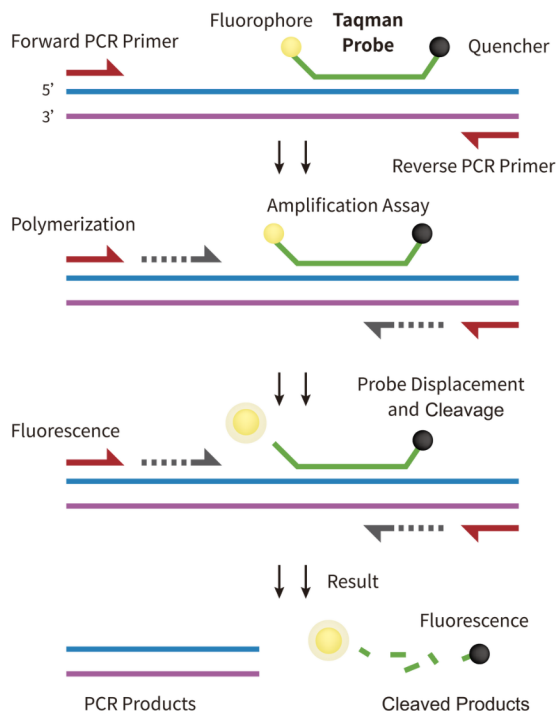
qPCR Probes

Based on our professional [gene synthesis](#) and molecular biology platforms, Synbio Technologies provides high-quality nucleic acid probes with batch-to-batch consistency for qPCR/SNP detection. We can also provide a wide variety of modifications or labeling at the 5' and 3' ends or a designated position of the probe according to the specific needs of our customers, in order to enrich the types of qPCR probes and improve the efficiency and accuracy of qPCR assays.

SYBR Green PCR



TaqMan Probe



Modifiers	Modifications	Purification
TAMRA	5'FAM-3'TAMRA, 5'HEX-3'TAMRA, 5'TET-3'TAMRA, 5'JOE-3'TAMRA	HPLC/PAGE
BHQ1	5'FAM-3'BHQ1, 5'HEX-3'BHQ1, 5'VIC-3'BHQ1, 5'NED-3'BHQ1, 5'TAMRA-3'BHQ1, 5'JOE-3'BHQ1	
BHQ2	5'Cy5-3'BHQ2, 5'Cy3-3'BHQ2, 5'ROX-3'BHQ2	
MGB	5'FAM-3'MGB, 5'VIC-3'MGB, 5'NED-3'MGB, 5'HEX-3'MGB, 5'ROX-3'MGB, 5'CY5-3'MGB, 5'CY3-3'MGB, 5'JOE-3'MGB	
DABCYL	5'FAM-3'DABCYL, 5'HEX-3'DABCYL, 5'JOE-3'DABCYL, 5'ROX-3'DABCYL, 5'TAMRA-3'DABCYL, 5'CY5-3'DABCYL	

* The above are our suggested purification methods. If you need other purification methods, please contact us for a quote at quote@synbio-tech.com.

* The estimated turnaround time for research use is 3-5 days and 1-2 weeks for industrial use.

Service Standards for Research or Industrial Use

Application Level	Research Application	Industrial Application
Synthetic Specification	nmol	μmol
Turnaround Time	3-5 days	1-2 weeks
Price	Start from \$125	Start from \$185
Standard Delivery Project	Samples, COA file, MS or HPLC report.	Sample, COA file, MS or HPLC report, Fluorescence full wavelength scan, etc.
Purification	RP-HPLC/PAGE, etc.	RP-HPLC/IE-HPLC/Dual HPLC, etc.
QC	RP-HPLC detection ≥90%, LC-MS detection molecular weight deviation <0.1%, Full wavelength scanning (optional)	RP-HPLC detection ≥95%, IE-HPLC detection ≥95%, LC-MS detection molecular weight deviation <0.1%, full wavelength scanning (optional), others
Cross-Contamination	Conventional platform anti-pollution process	Special anti-pollution process
Delivery Form	Dry powder	Dry powder

Unbeatable Advantages

- **High Purity:** Special purification processes ensure efficient removal of small molecule fluorescent residue and purity up to 98%.
- **Strict Quality Control:** ISO 13485 quality control management system ensures real-time monitoring of probe production and batch-to-batch consistency.
- **Diverse Production Scale:** With experienced probe synthesis experts and optimized production processes, we can provide products from nmol to umol scale.

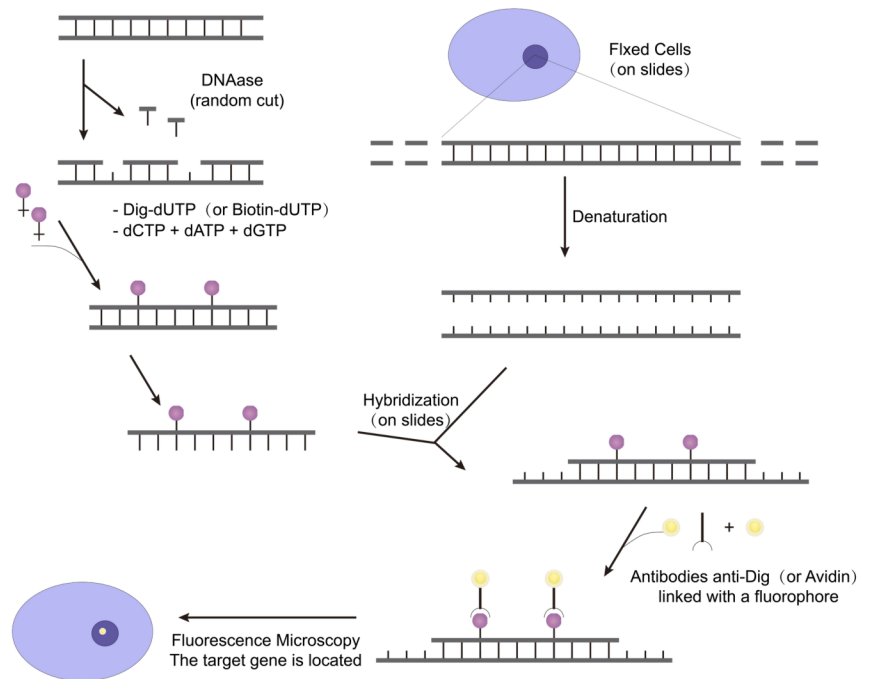
Service Deliverables

- Lyophilized DNA Oligo Powder
- Tube (Transparent or Dark), 96-Well Plate, or 384-Well Plate
- Certificate of Analysis (COA) including Sequencing Information, OD, T_m (C°), etc.

FISH Probes

FISH (fluorescent in situ hybridization) technology is based on the hybridization of fluorescent-labeled DNA probes with complementary sequences of DNA or RNA in cells. It is regarded as the gold standard in many detection projects. FISH probes can be labeled directly by binding to fluorescent nucleotides or indirectly by binding to reporter molecules, which are then detected by fluorescent antibodies or other affinity molecules. The probe and the target are finally revealed in situ by microscopic analysis. FISH probes are widely used in gene detection, personalized therapy, gene mapping, and other fields because of their strong specificity, stronger fluorescence, stability, and multiple staining, all while retaining information at the single cell level.

FISH (Fluorescent In Situ Hybridization)



1. Multiple Fluorescence Types

Please select the appropriate fluorescence combination according to the fluorescence spectrum. The following are the commonly used fluorescence, if you need other fluorescence, please contact us for a quote at quote@synbio-tech.com.

FAM	Texas Red	AMCA
HEX	ROX	ATTO/Alexa 488
VIC	Cy3	ATTO/Alexa 532
NED	Cy5	ATTO/Alexa 647

3. Syno Vision Fluorescence In Situ Hybridization Probe

Synbio Technologies utilizes the industry-leading, high-throughput oligo pool synthesis platform to design and produce target-specific FISH probes. The probe produced by this platform has the characteristics of strong specificity, easier binding to target genes, stronger fluorescence and stability.

Provided by Customers	Turnaround Time	Deliverable
Physical location of the target area, Target sequence, Designed probe sequence	4-8 Weeks	Fluorescently labeled DNA probe solution

Order Requirements

- Oligo Sequence
- Modifier Type and Position
- Purification Method
- Synthesis Scale