

A microscopic view of cells, likely cancer cells, with a magenta text box overlaid.

Molecular Diagnostic

Reagents



PCRBIOSYSTEMS
simplifying research

At PCR Biosystems we understand that every molecular diagnostic assay is different. With this in mind we offer bulk and custom supply, OEM manufacturing, and tailored technical support to help you achieve the most from our market-leading enzymes and mixes. Our products are extensively tested and undergo a comprehensive, multi-step quality control process according to ISO 13485 standards, to ensure optimum performance, consistency and traceability for your molecular diagnostic assay.



Lyophilisable & Air-Dryable Products

Lyophilisation and air-drying offer many advantages such as ambient storage and increased versatility in sample input volume. Our optimised lyo-ready and air-dryable mixes include a glycerol-free 4x qPCR mix containing hot start Taq polymerase, dNTPs, MgCl₂ and a blend of excipients for reliable drying, without loss of activity. High concentration enzymes are also available to ensure you have complete control of your downstream assay development.

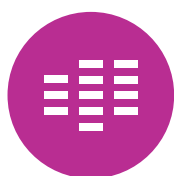
Product	Description	Pack size	Presentation	Cat. no.
Air-Dryable Probe Mix	Air-dryable 4x qPCR mix for DNA assays	600 reactions	3 x 1 mL	PB90.31-03
Air-Dryable Inhibitor-Tolerant Probe Mix	Air-dryable 4x qPCR mix for DNA assays on inhibitor-rich samples	600 reactions	3 x 1 mL	PB90.41-03
Air-Dryable Probe 1-Step Mix	Air-dryable all-in-one 4x qPCR mix for DNA and RNA assays	600 reactions	3 x 1 mL	PB90.21-03
Air-Dryable Inhibitor-Tolerant Probe 1-Step Mix	Air-dryable all-in-one 4x qPCR mix for DNA and RNA assays on inhibitor-rich samples	600 reactions	3 x 1 mL	PB90.51-03
Lyo-Ready Probe Mix	Lyophilisable 4x qPCR mix for DNA assays	2000 reactions	2 x 5 mL	PB90.02-10
Lyo-Ready Probe 1-Step Kit	Lyophilisable 4x qPCR mix plus separate high concentration UltraScript RTase for RNA assays	2000 reactions	[2 x 5 mL mix] & [12.5 µL RTase]	PB90.14-10
HS Taq DNA Polymerase (250 U/µL)	Lyo-compatible high concentration Taq polymerase plus separate anti-Taq antibody	5000 units	[1 x 20 µL Taq] & [1 x 67 µL antibody]	PB10.28-05
UltraScript® Reverse Transcriptase (8000 U/µL)	Lyo-compatible high concentration RTase. No RNase inhibitor	80 000 units	[1 x 10 µL RTase without RNase inhibitor] & [1 x 1.5 mL buffer]	PB30.13-01



qPCR Mixes

Our universal probe mixes combine antibody-mediated hot start technology and advanced buffer chemistry to give superior sensitivity and specificity in all probe-based qPCR and 1-step RT-qPCR assays. The increased sensitivity of our probe-based qPCR mixes make them the perfect choice for multiplexing diagnostic targets.

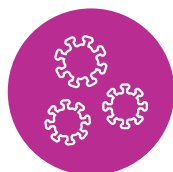
Product	Description	Pack Size	Presentation	Cat. no.
Clara® Probe Mix No-ROX	4x qPCR mix for DNA assays	600 reactions	3 x 1 mL	PB20.63-03
Clara® Inhibitor-Tolerant Probe Mix No-ROX	4x qPCR mix for DNA assays on inhibitor-rich samples	600 reactions	3 x 1 mL	PB20.73-03
Clara® Probe 1-Step Mix No-ROX	All-in-one 4x qPCR mix for DNA and RNA assays	600 reactions	3 x 1 mL	PB25.83-03
Clara® Inhibitor-Tolerant Probe 1-Step Mix No-ROX	All-in-one 4x qPCR mix for DNA and RNA assays on inhibitor-rich samples	600 reactions	3 x 1 mL	PB25.93-03
qPCR BIO Probe 1-Step Go No-ROX	2x qPCR mix plus separate RTase Go for RNA assays	300 reactions	[3 x 1 mL mix] & [1 x 500 µL RTase]	PB25.43-03
qPCR BIO Probe 1-Step Detect with AptaLock™	4x qPCR mix plus separate UltraScript RTase with AptaLock™ warm start	200 reactions	[1 x 1 mL mix] & [1 x 200 µL RTase]	PB25.63-01



HS Taq Polymerases & Anti-Taq Antibodies

Our enhanced HS Taq DNA polymerases are robust and versatile enzymes that use antibody-mediated hot start technology to maximise the sensitivity and specificity of your reaction. An optional 5x buffer is available with dNTPs, MgCl₂ and enhancers included. We also provide our anti-Taq antibody blend as an individual component for enhanced assay optimisation.

Product	Description	Pack size	Presentation	Cat. no.
PCR BIO HS Taq DNA Polymerase	Taq Polymerase (5 U/µL) incorporating anti-Taq antibody	250 units	1 x 50 µL	PB10.21-P1
PCR BIO HS Taq DNA Polymerase	Taq Polymerase (5 U/µL) incorporating anti-Taq antibody plus optimised buffer	250 units	[1 x 50 µL HS Taq] & [2 x 1 mL buffer]	PB10.21-02
HS Taq Antibody (10mg/mL)	Monoclonal antibody blend to Taq DNA polymerase for use in hot start PCR	5000 units	1 x 67 µL	PB10.27



Reverse Transcription

UltraScript® and UltraScript® 2.0 are thermostable modified MMLV reverse transcriptases engineered for superior cDNA synthesis speed, yield and representation. UltraScript® allows highly sensitive reverse transcription up to 55 °C, whereas UltraScript® 2.0 can be used with temperatures over 55 °C to tackle the most challenging RNA sample types. Our RiboShield® RNase Inhibitor will ensure your assay is completely RNase free.

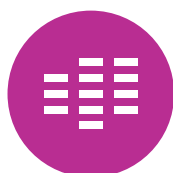
Product	Description	Pack size	Presentation	Cat. no.
UltraScript® Reverse Transcriptase	Thermostable RTase (200 U/μL) with RNase inhibitor plus buffer	40 000 units	[2 x 100 μL RTase] & [4 x 200 μL buffer]	PB30.12-04
UltraScript® 2.0 Reverse Transcriptase	Highly thermostable RTase (200 U/μL) with RNase inhibitor plus buffer, for challenging applications	40 000 units	[2 x 100 μL RTase] & [4 x 200 μL buffer]	PB30.33-04
RiboShield® RNase Inhibitor (40 U/μL)	General RNase inhibitor, inhibits eukaryotic RNases including RNase A, B and C	10 000 units	4 x 62.5 μL	PB30.23-10



Isothermal Amplification

Engineered for fast isothermal amplification, the IsoFast® range of reagents is based on the large fragment of Bst DNA polymerase. This portion of the enzyme contains 5'-3' polymerase activity and strong strand displacement capabilities, with an optimal reaction temperature of 65 °C. Aptalock™ hot start is mediated by our proprietary aptamer technology.

Product	Description	Pack size	Presentation	Cat. no.
IsoFast® Bst Polymerase	Bst DNA Polymerase (8 U/μL), large fragment	8000 units	[1 x 1 mL Bst] & [2 x 1.25 mL buffer A] & [3 x 1.7 mL buffer B]	PB80.10-08
IsoFast® Bst Polymerase (120 U/μL)	High concentration Bst DNA Polymerase, large fragment	8000 units	[1 x 67 μL Bst] & [2 x 1.25 mL buffer A] & [3 x 1.7 mL buffer B]	PB80.14-08
IsoFast® Bst Mix	2x Bst Mix plus 20x fluorescent dye for DNA assays	500 reactions	[5 x 1.25 mL mix] & [1 x 625 μL dye]	PB80.12-05
IsoFast® Bst 1-Step Mix	2x Bst Mix plus separate RTase Go and 20x fluorescent dye for RNA assays	500 reactions	[4 x 1.6 mL mix] & [1 x 1 mL RTase] & [1 x 625 μL dye]	PB80.21-05
IsoFast® Hot Start Bst Polymerase	Bst DNA Polymerase (8 U/μL), large fragment with Aptalock™ hot start	8000 units	[1 x 1 mL Bst] & [2 x 1.25 mL buffer A] & [3 x 1.7 mL buffer B]	PB80.40-08
IsoFast® Hot Start Bst Mix	2x Bst Mix with Aptalock™ hot start plus 20x fluorescent dye for DNA assays	500 reactions	[5 x 1.25 mL mix] & [1 x 625 μL dye]	PB80.42-05
IsoFast® Hot Start Bst Colour Mix	2x Bst Mix with pH-based dye for rapid positive/negative screening	500 reactions	5 x 1.25 mL	PB80.51-01



High Fidelity Polymerases

VeriFi® Polymerase is a single enzyme derived from Pfu DNA polymerase for its 3'-5' exonuclease (proofreading) activity. Proprietary mutations improve DNA binding and increase processivity, resulting in shorter extension times, higher yields and the ability to amplify longer and more difficult targets. Aptalock™ hot start is mediated by our proprietary aptamer technology.

Product	Description	Pack size	Presentation	Cat. no.
VeriFi® Hot Start Polymerase	Enzyme only (2 U/μL), for long range and high fidelity PCR with Aptalock™ hot start	100 units	1 x 50 μL	PB10.45-P1
VeriFi® Hot Start Polymerase	Enzyme (2 U/μL), buffer and enhancer, for long range and high fidelity PCR with Aptalock™ hot start	500 units	[1 x 250 μL VeriFi] & [3 x 1.7 mL buffer] & [2 x 1.7 mL enhancer]	PB10.45-05
VeriFi® Library Amplification Mix	Specialised 2x mix with Aptalock™ hot start for NGS library amplification workflows including Illumina	250 reactions	5 x 1.25 mL	PB72.10-05

Bulk and custom pack sizes are available for all products listed



PCRBIO SYSTEMS
simplifying research

Version 5.2