# Polymerases

## PCR 2.0 by BIORON

20th ANNIVERSARY | BIORON

YOU CAN EXPECT:

- GREAT VARIETY OF PCR APPLICATIONS
- COMPONENTS FOR YOUR PRODUCTION
- IVD RAW MATERIALS UNDER ISO 13 485

Polymerases made in Germany by

BIORON

## BIORON's DNA Polymerases: general overview

BIORON offers a wide range of polymerases for various applications. All polymerases are provided with advanced reaction buffers. For optimization on customers' side we provide different buffer systems (based on ammonium or potassium) for most of our polymerases.

| Characteristics | Concentration per µl | Application | | | 5 –3' Exonuclease | Strand Displacement | Reverse Transcriptase activity | Hot Start | Amplifications up to | REF | Pack size |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | End-point | Real Time | Multiplex | | | | | | | |
| SuperTaq* | 5 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | ✘ | 5 kb | 108002<br>108010 | 200 U<br>1.000 U |
| SuperHotTaq* | 5 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | AB | 5 kb | 129002<br>129010 | 200 U<br>1.000 U |
| SuperHotTaq HC* | 30 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | AB | 5 kb | 129030HC<br>129030HC-GF | 1.000 U<br>2.000 U |
| AptaHotTaq* | 5 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | Aptamer | 5 kb | 119602<br>119610 | 200 U<br>1.000 U |
| AptaHotTaq HC* | 30 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | Aptamer | 5 kb | 119630HC | 1.000 U |
| SmartTaq* | 5 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | ✘ | 7 kb | 103020<br>103022 | 200 U<br>1.000 U |
| SmartHotTaq* | 5 U | ✔ | ✔ | ✔ | ✔ | ✘ | ✘ | AB | 7 kb | 102020<br>102022 | 200 U<br>1.000 U |
| Reverse Transcriptase* | 200 U | ✔ | (✔) | ✔ | ✘ | ✘ | ✔ | ✘ | 7 kb | 105500<br>105500GF | 50.000 U<br>100.000 U |
| SD Polymerase | 10 U | ✔ | (✔) | ✔ | ✘ | ✔ | ✘ | ✘ | 30 kb | 108702<br>108710 | 200 U<br>1.000 U |
| SD Polymerase | 50 U | ✔ | (✔) | ✔ | ✘ | ✔ | ✘ | ✘ | 30 kb | 108800<br>108850 | 1.000 U<br>5.000 U |
| SD Polymerase HotStart | 10 U | ✔ | (✔) | ✔ | ✘ | ✔ | ✘ | AB | 30 kb | 108902<br>108910 | 200 U<br>1.000 U |

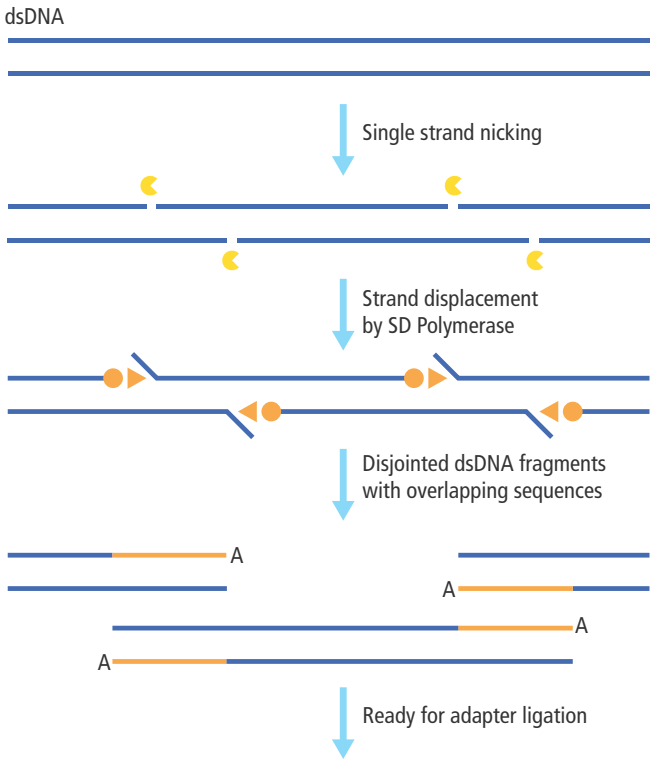
* All variants of these polymerases fall under our ISO 13485 certificate (medical).

**BIORON's SuperTaq** DNA Polymerase is suitable for all PCR applications where no HotStart is required. The enzyme shows a excellent temperature stability and possesses a high specifity and processivity. Available as high concentrated variant upon request.

The **SuperHotTaq** has the perfect ratio between Taq Polymerase and anti-Taq antibody which allows convienent reaction set-up at room temperature. One enzyme, 100 possible applications. It is especially suitable for complex genomic or cDNA templates or low copy number targets. SuperHotTaq is temperature stable and can be used and stored at room temperature for several days without cooling.
The **AptaHotTaq** is a variant of SuperHotTaq where the polymerase is reversibly blocked by DNA-aptamers instead of antibody. SuperHotTaq and AptaHotTaq are available in customized variants like high concentration (HC) or glycerol free (GF) for lyophilization. An additionally purified ultra pure (UP) version of the SuperHotTaq for super sensitive assays is available on request. All variants of our SuperTaq and AptaTaq fall under our **ISO 13485 certificate** (medical).
**SmartHotTaq** is a genetically modified version of SuperHotTaq, which gives the enzyme a higher processivity and stronger resistance against inhibitors. Especially recommended for qPCR applications with high multiplexing grade. This product has also been developed for production of diagnostic kits. Customized variants with higher concentration or without glycerol are available upon request. All three "HotTaq" Polymerases are available without antibody or DNA-aptamer.

Our **Reverse Transkriptase** is a modified M-MuLV (Moloney Murine Leukemia Virus) Reverse Transcriptase. The RNA or DNA directed polymerase has a reduced RNase H stability and a higher thermostability than other Reverase Transcriptases. Reverase can be combined with Taq Polymerase for RT-qPCR applications. It is also available as glycerol free variant for lyophilization.

**SD Polymerase** is BIORON's patented & unique thermostable enzyme with 5'-3' polymerase and 5'-3' strand displacement activity. It is suitable for Isothermal Amplification and PCR amplification of short and long DNA fragments (100 bp - 30 kb) from simple and complex templates without special optimisation. Due to displacement activity SD Polymerase is efficient in resolving secondary structures. Available in customized variants e.g. with attached Antibody (AB) for room temperature setup or as high concentrated product (HC).



BIORON

Our QM system has been certified by

TÜV SÜD
EN ISO 13485
tuv-sud.com/ps-cert

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