




Taq-Polymerase – Surveillance report – BIORONs PCR Enzymes are Premium Products

The Taq-Polymerases are key tools for modern Life Sciences Research and the thermostable Enzymes work and tolerate temperatures at 95° C. Based on the numerous applications for amplification of RNA/DNA gene information with the Polymerase Chain Reaction, this method offered breakthroughs in Life Science Research, Diagnostics, Medicine and Bioanalysis as well as further important fields like Forensic and Food safety Analytics.

Due to continuous Improvements of PCR methods and Enzyme modifications in the recent 20 years with Taq-Polymerase, we see now various combinations of this key enzyme. For example Taq-Polymerase with Hot start function, Antibody labeling, Apatamer capping and genetical or chemical modified structures. Today the Life Sciences market offers a huge portfolio of tools and BIORON compared the main key products of global supply with our/their own products.

This market and product surveillance includes 9 different Taq-Polymerases of 6 different suppliers (BIORON, Biotechrabbit, Jena Bioscience, New England Biolab, Promega and Roche). Furthermore the test protocol included 6 specific approvals.

- Check – residual DNA-content
- Sensitivity limits check with dilution
- Monoplex-Assay – Sensitivity und Fluorescence performance
- Monoplex-Assay – Stress Check
- 4x Multiplex – Sensitivity, Fluorescence performance and Stress-Check
- 4x Multiplex and Stress-Check

Supplier	 BIORON	S1	S2	S3	S4	S5	S6
	SuperHotTaq DNA Polymerase	Hot Start Taq DNA Polymerase	Hot Start Polymerase	Hot Start Taq DNA Polymerase	Hot Start Polymerase	Taq Fast DNA Polymerase	Taq HotStart
Polymerase	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DNA-Purity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sensitivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monoplex Test	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monoplex Stress Check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multiplex	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multiplex Stress	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ranking: 1/5, 2/5 or 1/3 Ranking: 3/5 or 2/3 Ranking: 4/5, 5/5 or 3/3

Summary : Both BIORON Taq-Polymerases belong to the best performing products in this comparison. The most premium supplier perform in same benchmarking result field, with 1 exception. Especially the BIORON Superhot Taq Polymerase show excellent results regarding the DNA purity and the Multiplexing performance in comparison to the field of the TOP Brand products.