CANNABIS AND HEMP MICROBIAL TESTING TOOLS, SERVICE, AND SUPPORT





ABOUT BIO-RAD LABORATORIES

Bio-Rad is a global leader in developing, manufacturing, and marketing a broad range of innovative products for the life science research and clinical diagnostic markets. With a focus on quality and customer service for over 65 years, our products advance the discovery process and improve healthcare. Our customers include university and research institutions, hospitals, public health and commercial laboratories, biotechnology, pharmaceutical, as well as applied laboratories that include food safety and environmental quality.

PERFORMANCE SPECIFICATIONS OF REAL-TIME PCR KITS AND CHROMOGENIC MEDIA

| Parameter | iQ-Check Real-Time PCR | RAPID'Chromogenic Media | |
|-----------------------|---|---|--|
| Assays available | Aspergillus ^{1,2} E. coli O157:H7 Enterobacteriaceae Listeria spp. Listeria monocytogenes Salmonella ² STEC VirX ² STEC SerO II ² | E. coli E. coli O157:H7 Enterobacteriaceae Listeria Salmonella Staphylococcus | |
| Principle | DNA-based detection of conserved genetic targets using patented double stranded probes | Chromogen-based colorimetric detection utilizing bacterial enzymatic activity | |
| Applications | Presumptive testing | Detection and/or confirmations post-PCR | |
| Assay format | Qualitative real-time polymerase chain reaction, ready to use reagents | Qualitative and quantitative culture media, ready to use and dehydrated | |
| Time to results | 2.5 hr post-enrichment | 24 hr post-enrichment | |
| Result interpretation | Automated using software | Visual based on colored colonies | |
| Reagent shelf life | 2 years | 3 months (ready to use) 3 years (dehydrated) | |
| Compatible matrices | All cannabis and hemp products | All cannabis and hemp products | |

¹ Aspergillus speciation kits available



² AOAC-PTM approved kits

EASY FOUR-STEP IQ-CHECK REAL-TIME PCR PROTOCOL

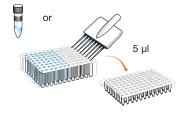
1 Sample Enrichment

Enrich 1 g sample in 9 ml of buffered peptone water-based enrichment broth under the recommended conditions.



2 DNA Extraction

Combine homogenized sample with lysis reagent and subject to heat treatment for 15 min to lyse cells and extract DNA. Transfer 5 µl of extracted DNA to PCR mix aliquoted in the PCR microplate.



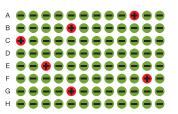
3 PCR Amplification

Launch CFX Manager IDE software, create plate setup and start amplification.



4 Automated Results

Analyze qualitative data generated by software. Verify positive, negative, and internal amplification controls.





YOUR TRUSTED GLOBAL PARTNER

Serving you from our locations in North America, South America, Europe, Africa, Asia, and Australia



Our global support and service team is dedicated to limiting downtime and maximizing your productivity.

"We use Bio-Rad's iQ-Check kits for their simplicity, ease of use, and scalability. The workflows are easily adaptable, which is very important to our lab's dynamic throughput, where we could be testing one to a hundred samples a day. We also see Bio-Rad as a partner in innovation, as their sales and technical support teams work hand-in-hand with our lab to ensure our methods generate the highest quality data in the industry."

NIKHIL KUMAR, CANALYSIS LABORATORIES

"I have been performing PCR for 15 years, using Bio-Rad kits for nearly 2 years. The iQ-Check PCR kits are the easiest and most intuitive kits I have ever used. I highly recommend using Bio-Rad for your PCR kit needs."

KENDRA WHEELER, CW ANALYTICAL

"In a high-throughput environment like a cannabis testing laboratory, having reliable and consistent automation is invaluable. Partnering with Bio-Rad and utilizing the iQ-Check Prep Automated platform has allowed us to virtually eliminate operator error from our gPCR preparation. With the iQ-Check Prep we are able to train even the newest laboratory technicians to execute qPCR at an expert level over the course of a few days."

MICHAEL ESPOSITO, MCR LABS

Ordering Information

| Catalog # | Description | Catalog # | Description |
|---------------|---|--------------------------|----------------------------------|
| iQ-Check Kits | | RAPID'Enterobacteriaceae | |
| 12010806 | iQ-Check Aspergillus | 3554012 | Ready to use, 200 ml x 6 bottles |
| 3578114 | iQ-Check E.coli O157:H7 Kit, 96 reactions | 3564004 | Dehydrated base, 500 g |
| 12003068 | iQ-Check Enterobacteriaceae, 96 reactions | RAPID'Listeria spp. | |
| 3578113 | iQ-Check Listeria spp. | 3564744 | Dehydrated base, 500 g |
| 3578124 | iQ-Check Listeria monocytogenes | 3564745 | Supplement 1, 1 box, 10 vials |
| 3578123 | iQ-Check Salmonella II Kit, 96 reactions | 3564746 | Supplement 2 1 box 10 vials |

Supplement 2, 1 box, 10 vials 3564746 iQ-Check STFC VirX Kit 96 reactions 3578139 RAPID'L.mono 12013174 iQ-Check STEC SerO II Kit

> iQ-Check Free DNA Removal Solution. 1 vial 3563694 (175 mg lyophilized powder) iQ-Check Free DNA

Removal Reagent, 1 tube (9 ml) iQ-Check 10x Activation Buffer 12012383 iQ-Check Purification Reagent, 2.5 g, 96 reactions

iQ-Design Assay Kits

iQ-Design Assay Aspergillus niger, 100 reactions 12015336 3553669 12015337 iQ-Design Assay Aspergillus flavus, 100 reactions iQ-Design Assay Aspergillus fumigatus, 100 reactions 12015260 3563961 12015330 iQ-Design Assay Aspergillus Identification Positive Control, 100 reactions

17007081 iQ Multiplex Powermix, 100 reactions iQ-Design Assay Aspergillus Identification Solution, 100 samples

Media for Sample Enrichment

Buffered Peptone Water Plus, 225 ml x 6 bottles 3554179

3564684 Buffered Peptone Water Plus, 500 g

RAPID'E.coli 2

17006992

3594970

3555299 Ready to use, 100 ml x 6 bottles 3564024 Dehydrated base, 500 g

3563964 Ready to use, 90 mm x 120 plates Ready to use, 90 mm x 20 plates 3555294 Ready to use, 90 mm x 120 plates 3564293 Dehydrated base, 500 g 3564294 Supplement 1, 1 box, 10 vials 3564746 Supplement 2, 1 box, 10 vials Rhamnose Test, 1 ml x 28 tubes

RAPID'Salmonella

Ready to use, 90 mm x 20 plates 3563963 Ready to use, 90 mm x 120 plates 3564705 Dehydrated base, 500 g

RAPID'Staph

3563960 Ready to use, 90 mm x 20 plates 3564704 Dehydrated base, 500 g

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