



RAPID[®]Chromogenic Media

Culture media for the detection and enumeration
of food and environmental pathogens and quality indicators



RAPID'Chromogenic Media Technology and Applications

RAPID'Chromogenic Media are a complete range of highly selective chromogenic media designed to detect and enumerate a variety of microorganisms in food and environmental samples. They offer economical, labor-saving protocols and provide a shorter time to results than classical methods. In addition, the combination of the selected chromogenic mixture and high-quality raw material allows a high level of contrast, high selectivity, and high sensitivity, making the plates easy to read.

AL (Agar *Listeria* according to Ottaviani and Agosti)



Applications

- Detection of *L. monocytogenes* and *Listeria* spp.
- Enumeration of *L. monocytogenes*
- Approved for ISO 11290-1 and 11290-2 protocols
- Recommended in FDA BAM Chapter 10
- Approved for MFLP-74 protocol



L. monocytogenes



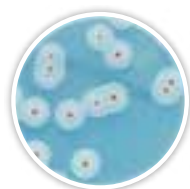
Listeria spp.



Non-*Listeria*

| Enzymatic Activity | <i>L. monocytogenes</i> | <i>Listeria</i> spp. | Non- <i>Listeria</i> |
|--------------------|-------------------------|----------------------|----------------------|
| PI-PLC detection | + | - | - |
| β-D-Glucosidase | + | + | - |

RAPID'*B.cereus*



Applications

- Enumeration of the *Bacillus cereus* group
- Clear enumeration of the sensitive *B. cytotoxicus*
- No confirmation required
- Inhibition of background flora on raw matrices



B. cereus (i.e., *B. cereus sensu stricto*)



B. cytotoxicus



B. cereus (i.e., *B. mycooides*)



Atypical *B. cereus* (i.e., *B. thuringiensis*)

| Enzymatic Activity | <i>B. cereus</i> (i.e., <i>B. cereus sensu stricto</i>) | <i>B. cytotoxicus</i> | <i>B. cereus</i> (i.e., <i>B. mycooides</i>) | Atypical <i>B. cereus</i> (i.e., <i>B. thuringiensis</i>) |
|-----------------------|--|-----------------------|---|--|
| Chromogenic substrate | + | + | + | + |
| Phospholipase | + | + | + | - |

RAPID'*Campylobacter*



Applications

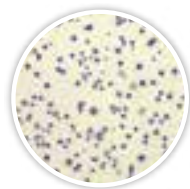
- Detection of *Campylobacter* spp.
- Enumeration of *Campylobacter* spp.
- Approved as second media in ISO/TS 10272-1 protocol
- Inhibition of competing organisms



Thermophilic *Campylobacter* spp.

| Enzymatic Activity | Thermophilic <i>Campylobacter</i> spp. |
|-----------------------|--|
| Chromogenic substrate | + |

RAPID'*E.coli* 2



Applications

- Enumeration of *E. coli*
- Enumeration of other coliforms
- Differentiation by color, not gas formation
- Can be incorporated into a hygiene monitoring program



E. coli



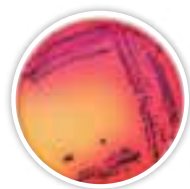
Other coliforms



Non-coliforms

| Enzymatic Activity | <i>E. coli</i> | Other coliforms | Non-coliforms |
|--------------------|----------------|-----------------|---------------|
| Glucuronidase | + | - | - |
| Galactosidase | + | + | - |

RAPID'*E.coli* O157:H7



Applications

- Detection of *E. coli* O157:H7
- Approved as second media in ISO 16654 protocol
- Confirmation of iQ-Check *E. coli* O157:H7 real-time PCR results
- Detection of rare sorbitol-positive strains



E. coli O157:H7



Other *E. coli*



Other bacteria

| Enzymatic Activity | <i>E. coli</i> O157:H7 | Other <i>E. coli</i> | Other bacteria |
|--------------------|------------------------|----------------------|----------------|
| Glucuronidase | - | + | - |
| Galactosidase | + | + | - |
| Sorbitol | - | + | +/- |

RAPID[®] Enterobacteriaceae



Applications

- Enumeration of *Enterobacteriaceae*
- Differentiation of colonies by size
- Surface inoculation or pour plate method
- Can be incorporated into a hygiene monitoring program



| Enzymatic Activity | <i>Enterobacteriaceae</i> | Non- <i>Enterobacteriaceae</i> |
|----------------------|---------------------------|-----------------------------------|
| Glucose fermentation | + | - |

RAPID[®] Listeria spp.



Applications

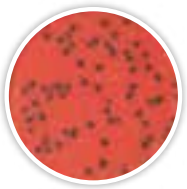
- Detection of *Listeria* spp.
- Confirmation of iQ-Check *Listeria* spp. real-time PCR results
- Can be part of an environmental monitoring program



Listeria spp.

| Enzymatic Activity | <i>Listeria</i> spp. |
|--------------------|----------------------|
| β-D-Glucosidase | + |

RAPID[®] L.mono



Applications

- Enumeration of *L. monocytogenes*
- Detection of *L. monocytogenes* and *Listeria* spp.
- Approved as second media in ISO 11290-1 protocol
- Recommended in FDA BAM Chapter 10
- Approved for MFHPB-30 and MFLP-74 protocols
- Confirmation of iQ-Check *Listeria monocytogenes* II real-time PCR results



| Enzymatic Activity | <i>L. monocytogenes</i> | <i>L. ivanovii</i> | <i>L. innocua</i> | <i>L. welshimeri</i> |
|---------------------|-------------------------|--------------------|-------------------|----------------------|
| PI-PLC detection | + | + | - | - |
| Xylose fermentation | - | + | - | + |

RAPID[®] Sakazakii



Applications

- Detection of *Cronobacter* spp.
- Approved for ISO/TS 22964:2006 protocol
- Confirmation of iQ-Check *Cronobacter* spp. real-time PCR results



| Enzymatic Activity | <i>Cronobacter</i> spp. | Other <i>Enterobacteriaceae</i> |
|--------------------|-------------------------|------------------------------------|
| α-D-Glucosidase | + | - |

RAPID[®] Salmonella



Applications

- Detection of *Salmonella* spp.
- Single 24 hr enrichment protocol without subculturing
- Approved as second media in ISO 6579 protocol
- Confirmation of iQ-Check *Salmonella* II real-time PCR results



| Enzymatic Activity | <i>Salmonella</i> spp. | Other <i>Enterobacteriaceae</i> | <i>Proteus</i> spp. |
|--------------------|------------------------|------------------------------------|---------------------|
| C8 esterase | + | + | - |
| β-D-Glucosidase | - | + | - |

RAPID[®] Staph



Applications

- Enumeration of coagulase-positive Staphylococci
- Final result in 24 hr



| Enzymatic Activity | <i>Staphylococcus</i> coagulase-positive | <i>Staphylococcus</i> coagulase-negative |
|-------------------------------|--|--|
| Potassium tellurite reduction | + | + |
| Egg yolk proteolysis | + | - |

Validations

| Chromogenic Media | NF Validation by AFNOR Certification | AOAC | NordVal | Health Canada | Chromogenic Media | NF Validation by AFNOR Certification | AOAC | NordVal | Health Canada |
|----------------------------------|--------------------------------------|------|---------|---------------|-----------------------------|--------------------------------------|------|---------|---------------|
| AL | • | | | | RAPID' <i>Listeria</i> spp. | • | • | | |
| RAPID' <i>B.cereus</i> | Pending | | | | RAPID' <i>L.mono</i> | • | • | • | • |
| RAPID' <i>Campylobacter</i> | • | | | | RAPID' <i>Sakazakii</i> | • | | | |
| RAPID' <i>E.coli</i> 2 | • | • | • | • | RAPID' <i>Salmonella</i> | • | • | • | |
| RAPID' <i>E.coli</i> O157:H7 | • | • | | | RAPID' <i>Staph</i> | | • | • | |
| RAPID' <i>Enterobacteriaceae</i> | • | | | | | | | | |

Ordering Information

Catalog # Description

Buffered Peptone Water Broth

3554179 **Ready to use**, 225 ml x 6 bottles
 3555795 **Ready to use**, 3 L x 4 bags
 3555790 **Ready to use**, 5 L x 2 bags
 3564684 **Dehydrated base**, 500 g

Fraser ½ Broth

3564604 **Dehydrated base**, 500 g
 3564616 **Supplement**, 1 box, 10 vials
 3555797 **Complete medium**, 225 ml x 6 bottles
 3555794 **Complete medium**, 3 L x 4 bags

AL

3563965 **Ready to use**, 90 mm x 120 plates
 3563695 **Ready to use**, 90 mm x 20 plates
 3564043 **Dehydrated base**, 500 g
 3555200 **Base medium**, 6 x quantity for 250 ml
 3564041 **Supplement 1**, 1 box, 10 vials
 3564042 **Supplement 2**, 1 box, 10 vials

RAPID'*B.cereus*

12007304 **Ready to use**, 90 mm x 20 plates
 12007305 **Dehydrated base**, 500 g
 12007306 **Supplement 1**, 1 box, 10 vials
 12007307 **Supplement 2**, 1 box, 10 vials

RAPID'*Campylobacter*

3564295 **Dehydrated base**, 500 g
 3564296 **Supplement**, 1 box, 10 vials
 3564297 **Campylobacter Confirm Latex Kit**, 50 tests (confirmation)

RAPID'*E.coli* 2

3555299 **Ready to use**, 100 ml x 6 bottles
 3555297 **Ready to use**, 200 ml x 6 bottles
 3564024 **Dehydrated base**, 500 g

RAPID'*E.coli* O157:H7

3564748 **Dehydrated base**, 100 g
 3564610 **Novobiocin Supplement**, 1 g bottle

RAPID'*Enterobacteriaceae*

3554012 **Ready to use**, 200 ml x 6 bottles
 3564004 **Dehydrated base**, 500 g

Catalog # Description

RAPID'*Listeria* spp.

3564744 **Dehydrated base**, 500 g
 3564745 **Supplement 1**, 1 box, 10 vials
 3564746 **Supplement 2**, 1 box, 10 vials

RAPID'*L.mono*

3563964 **Ready to use**, 90 mm x 120 plates
 3563694 **Ready to use**, 90 mm x 20 plates
 3555294 **Ready to use**, 190 ml + supplement
 3564293 **Dehydrated base**, 500 g
 3564294 **Supplement 1**, 1 box, 10 vials
 3564746 **Supplement 2**, 1 box, 10 vials
 3553669 **Rhamnose Test**, 1 ml x 28 tubes

RAPID'*Sakazakii*

3563971 **Ready to use**, 90 mm x 20 plates
 3564976 **Dehydrated base**, 500 g

RAPID'*Salmonella*

3563961 **Ready to use**, 90 mm x 20 plates
 3563963 **Ready to use**, 90 mm x 120 plates
 3564705 **Dehydrated base**, 500 g
 3564709 **Enrichment supplement capsules**, 10x, 100 capsules
 3564710 **Enrichment supplement capsules**, 100 capsules
 3564712 **Enrichment supplement**, 100 analyses
 35934260 **Oxidase stripes**, pack of 50
 3553822 **ONPG Test**, 50 disks (confirmation)
 3556710 **Salmonella Latex Kit**, 75 tests (confirmation)
 3556711 **Salmonella Confirm Latex Kit**, 50 tests (confirmation)

RAPID'*Staph*

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

For more information and to see how our products can be incorporated into food testing workflows, visit our website:

RAPID'Chromogenic Media — bio-rad.com/rapidmedia
 iQ-Check Real-Time PCR Kits — bio-rad.com/iqcheck

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Laboratories, Inc.**

Life Science
Group

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United Kingdom 44 01923 47 1301

