RAPID'*B.cereus* chromogenic media has received the NF VALIDATION certificate according to ISO 16140-2 by AFNOR certification under the reference number BRD 07/26–03/19. RAPID'*B.cereus* is validated for the enumeration of all *Bacillus cereus* group in dairy products, ready-to-eat and ready-to-reheat products, and vegetables. The new dehydrated format of the RAPID'*B.cereus* is now available. This format is composed of a 500g dehydrated base and two supplements.

The *Bacillus cereus* group comprises prolific organisms that are widely distributed in the environment. Some species of this group can be pathogenic to humans and/or animals, but only *B. cereus* sensu stricto and *B. cytotoxicus* have been described as food poisoning agents and present a risk for human health. Thus, *B. cereus* is considered as a 'process hygiene criteria' (Quality Indicator) by different national or international regulations or professional federations and should be quantified in different food matrices.

The ISO standard method (ISO 7932) for enumeration of *B. cereus* uses Mannitol Egg Yolk Polymyxin (MYP). Food matrices with significant background flora, like spices or raw vegetables, are challenging samples for MYP media and making the enumeration of *B. cereus* most of the time fastidious. In contrast, agar media having a too high selectivity do not allow the growth of sensitive *B. cereus* strains like *B. cytotoxicus* and result in an underestimated enumeration of the targeted bacteria. Finding a good compromise between the needs of selectivity and sensitivity is always a balancing exercise. It is exactly what the new chromogenic media developed by Bio-Rad achieves.

RAPID'*B.cereus* is the newest edition to the RAPID chromogenic media family. Based on a chromogenic principle and the detection of phospholipase activity, it allows the detection and the enumeration of *B. cereus* strains. *B. cereus* colonies appear red surrounded with an opaque halo. The selected nutritive mixture permits optimal growth of all the members of the *B. cereus* group in less than 24 hours and no confirmation step is required. At the same time, the background flora is inhibited by the selective mixture contained in the agar, even when highly contaminated matrices are tested. This selective mixture also prevents the spreading of rhizoid colonies like *B. mycoides*. The delicate balance of selective and nutritive agents also allows for clear enumeration of the sensitive *B. cytotoxicus*.

RAPID'*B.cereus* gives users confidence that they are enumerating all pathogenic *B. cereus* strains.

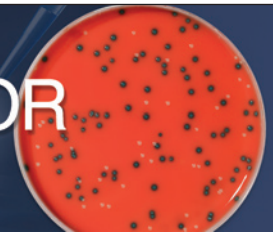
For more flexibility, RAPID'*B.cereus* agar is available as ready-to-use Petri dishes and 500g dehydrated medium with supplements to allow the use of either a plate surface inoculation protocol or pour plate protocol. In order to optimise laboratory workflow, the plates can be stored at 2-8°C for 72 hours prior to the reading step.

Visit bio-rad.com/rapidmedia for more information.

BIO-RAD

First published in International Food & Meat Topics volume 30.3

Bio-Rad's Listeria AFNOR update



RAPID'L.mono chromogenic medium: new confirmation options

While current classical methods for listeria detection are laborious and time consuming, RAPID'L.mono medium allows the direct detection and enumeration of Listeria monocytogenes and Listeria spp. in food and environmental samples, with a fast, simple and cost effective protocol.

In October 2019, a new extension was approved by AFNOR certification according to ISO 16140-2:2016 requirements, allowing two new confirmation options dedicated for Listeria genus by spotting on Palcam or AL. These new options are easy to perform and allow the confirmation of up to 15 positive samples onto one Palcam or AL plate making this a very flexible and cost effective solution.

At the same time, the extension of NF VALIDATION certification has been granted for AL Enumeration and Detection alternative methods for Listeria monocytogenes with the Rhamnose test. This new confirmation option, easy to handle and easy to read, allows the confirmation of the positive samples in only six hours. For more flexibility, the reading step can also be performed after 72 hours. This is an easy option for the differentiation of Listeria monocytogenes and Listeria ivanovii. Confirmation can be performed either with the standard method, spot on Palcam, or with real-time PCR.

iQ-Check Listeria spp. and iQ-Check Listeria monocytogenes renewal and extension

NF VALIDATION has been renewed for iQ-Check Listeria spp. and iQ-Check Listeria monocytogenes following the ISO16140-2 compared to the reference method ISO 11290-1 for the detection of Listeria spp. and Listeria monocytogenes in all human food products and industrial production environmental samples.This validation extension for the production environmental samples category includes:

- The reduction of the enrichment time to 18-26 hours (25% time reduction).
- The use of the iQ-Check Free DNA Removal Solution (removal of signal from free DNA in the sample).
- The use of a new Application Protocol File (APF) that significantly reduces PCR run time (38% time reduction).

Overall, these validation extensions provide increased flexibility for users as well as improved performance.

For more information visit bio-rad.com/foodscience

BIO-RAD

First published in International Food & Meat Topics volume 30.6