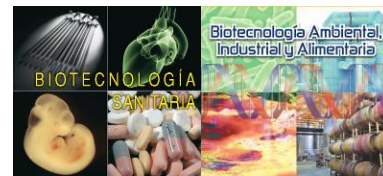


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Poster

## Verification of the alternative method COMPASS Listeria according to UNE-EN ISO 16140-3:2021 for detection of *Listeria monocytogenes*



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### ABSTRACT

*Listeria monocytogenes* is a ubiquitous bacterium, able to survive in different environments. It is a facultative intracellular pathogen that can cause listeriosis in animals and humans. It is transmitted through the eating of contaminated food, after which the bacteria can cross the intestinal barrier and reach target tissues, via the bloodstream, such as the liver and spleen. Although the disease is usually asymptomatic, for some groups, including children, elderly or immunocompromised people, infection with the bacterium can be life-threatening and in the case of pregnant women it can cause miscarriage. Thus, listeriosis has one of the highest case fatality rates among foodborne diseases, with numerous outbreaks of listeriosis occurring in Europe and the United States in recent years. In Spain, there is a clear increasing trend of listeriosis infection, standing out among the European Union countries, indicating a greater need for prevention and control of this disease. The EN/ISO 11290-1 standard defines the standard methodology to carry out the detection of *L. monocytogenes*, but it takes up to seven days to obtain the results. Therefore, accreditation of alternative and rapid methods in laboratories is necessary.

The objective of this work was to verify the detection of *Listeria monocytogenes* using the COMPASS *Listeria* method, in order to incorporate it into the daily procedures in Laboratorios Vital. For this purpose, the estimated LOD50 was calculated in six different matrices to compare it to the LOD50 calculated in the validation of the method. The results obtained were positive, so the verification can be considered valid.

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