

## عنوان مقاله:

Rapid Detection of *Listeria monocytogenes* Strains Isolated from Clinical and Non-Clinical Samples by Loop-Mediated  
(Isothermal Amplification Method (LAMP

## محل انتشار:

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## خلاصه مقاله:

Aims Diagnosis of *Listeria monocytogenes* infections is critical for epidemiological study and prevention of diseases. This study aimed at identifying *Listeria monocytogenes* isolates, using Loop-Mediated Isothermal Amplification Method (LAMP). Materials & Methods *Listeria* strains were obtained from clinical and seafood specimen. All *Listeria* strains were identified by standard microbiological and biochemical tests. The LAMP assay was performed at 65°C with a detection limit of 2.5 ng/μl for 46 min. Specific primers for the *hylA* gene were used to identify *L. monocytogenes*. The specificity of the assay was assessed, using DNA from *L. monocytogenes* ATCC 7644 and *L. ivanovii* ATCC 19119 and non-*Listeria* strains. Sensitivity of the LAMP assay was compared with polymerase chain reaction (PCR) method. Amplification LAMP products were visualized via calcein and manganous ions as well as agarose gel electrophoresis. Findings A total of 191 samples were obtained, including clinical and food samples. Then, 21 (10.9%) isolates were recovered from specimens. The LAMP results showed high sensitivity (97.2%) and specificity (100 %). The LAMP assay was higher sensitive than of the PCR assay. Conclusion This data showed that this method could be used as a sensitive, rapid, and simple identification tool for diagnosis of *L. monocytogenes* isolates and it may be suitable for epidemiological study plans

## کلمات کلیدی:

Identification; *Listeria monocytogenes*; Epidemiological Study; Polymerase Chain Reaction

## لینک ثابت مقاله در پایگاه سیویلیکا:

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