

عنوان مقاله:

Molecular Identification of *Mycobacterium avium* subsp. *Paratuberculosis* isolated from ELISA-Positive Samples by Nested PCR

محل انتشار:

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نویسندگان:

.Mahsa Soleimani - Department of Microbiology, Faculty of Biological Sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran

.Alireza Shahrjerdi - National Institute for Genetic Engineering and Biotechnology, Tehran, Iran

.Mitra Salehi - Department of Microbiology, Faculty of Biological Sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran

خلاصه مقاله:

Paratuberculosis (Johne's disease) is a chronic granulomatous small intestine disease caused by MAP. Diagnosing and isolating infected animals is the most important measure for controlling the disease. Therefore, this study aimed to molecularly identify mycobacterium isolated from ELISA-positive cows with Johne's disease by nested PCR from the samples from Markazi Province, Iran. For this purpose, ۲۹۳۸ samples were decontaminated and then cultured on the Herrold egg culture medium containing mycobactin and no mycobactin. After DNA extraction, PCR for ۱۶S rRNA was first performed, followed by nested PCR on positive samples. Of ۲۹۳۸ samples, ۸۷ were positive, and ۲۶ were suspected. All positive isolates were observed in Ziehl-Neelsen staining in microscopic expansion. A ۵۴۳-bp band was observed in ۲۶ tested samples and mycobacterium strains in PCR for ۱۶S rRNA, indicating the presence of mycobacterium in the above samples. Nested PCR was performed for all isolates and positive and negative control strains. A ۳۹۸-bp band was obtained in the first stage, and a ۲۹۸-bp fragment was obtained in the second stage, indicating the presence of MAP in the samples. Accordingly, nested PCR is suggested as a proper method for the quick and definitive diagnosis of disease cases.

کلمات کلیدی:

*Mycobacterium avium*, Johne's disease, ۱۶S rRNA, Nested PCR

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