

Abstract

Klebsiella pneumoniae is an important opportunistic pathogen that is associated with hospital-acquired infections. The capsular antigen is accounted a virulence causative factor of these bacteria. The objective of this research was survey rate of frequency of serotype of *Klebsiella pneumoniae* in clinical samples of Sistan and Baluchestan region. The number of 100 isolated of clinical samples was detected after standard biochemical tests. It was used from Multiplex PCR and six pairs of specific primer for identification of six serotype (K1, K2, K5, K20, K54 and K57). The optimum temperature was considered 61°C that was determined with gradient temperature Multiplex PCR. The results of this research showed that K2 serotype has the most frequency with 89% between isolated in Sistan and Baluchestan region. It was seen no other serotypes in isolates. 11% of isolates hadn't belonged to researched serotypes.

Keywords: *Klebsiella pneumoniae*, Capsular antigen, Serotype, Urinary tract infection



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**Determination of molecular serotype of
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clinical samples by multiplex PCR**

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