

## **A description of genes of *Corynebacterium pseudotuberculosis* useful in diagnostics and vaccine applications**

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Genet. Mol. Res. 7 (1): 252-260 (2008)

Received January 28, 2008

Accepted February 20, 2008

Published March 18, 2008

**ABSTRACT.** *Corynebacterium pseudotuberculosis*, a Gram-positive intracellular pathogen, is the etiological agent of caseous lymphadenitis or CLA. This bacterium infects goats and sheep and causes great economic losses worldwide annually, mainly for goat producers. Despite its importance, CLA is still poorly characterized. However, with advances in the genomic field, many *C. pseudotuberculosis* genes have already been characterized, mainly those related to virulence such as phospholipase D. Here, we examined the use of the several available genes of *C. pseudotuberculosis* and reviewed their applications in vaccine construction, more efficient diagnostics for CLA, and control of this disease, among other applications.

**Key words:** Phospholipase D; RecA; Caseous lymphadenitis