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Cloning and Heterologous Expression of Phytase Gene from *Pantoea* sp. 3.5.1

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Abstract

© 2016, Springer Science+Business Media New York. Phytases (myo-inositol hexakisphosphate phosphohydrolase) catalyzes the stepwise hydrolysis of phosphate groups from phytic acid (myo-inositol hexakisphosphate) or its salt phytate. These enzymes could be potentially used for the stereospecific and efficient production of different myo-inositol phosphate isomers with therapeutic features. In the present study, we cloned the 1728 bp open reading frame encoding *Pantoea* sp. 3.5.1 phytase into the expression vector pET28a. The recombinant *Escherichia coli* BL21 pLysS pET28a/agpP strain expressing *Pantoea* sp. 3.5.1 AgpP phytase was obtained.

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Keywords

Cloning, Expression, *Pantoea*, Phytase