

# LISTERIA MONOCYTOGENES MUTANTS THAT INDUCE MORE INTERFERON-BETA IN MACROPHAGES

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## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,381,236	07/05/2016	2007-025

## FULL DESCRIPTION

Systemic administration of interferon protein by either intravenous, intramuscular or subcutaneous injection has been most frequently used with some success in treating disorders such as hairy cell leukemia, Acquired Immune Deficiency Syndrome and related Kaposi's sarcoma. It is known, however, that proteins in their purified form are especially susceptible to degradation. For interferon- $\beta$ , the primary mechanisms of interferon degradation in solution are aggregation and deamidation. The lack of interferon stability in solutions and other products has heretofore limited its utility. Therefore, a more effective method of modulating the level of interferons, such as interferon- $\beta$ , is needed.

UC Berkeley researchers have developed mutant *Listeria* bacteria that modulate interferon- $\beta$  production are provided. The subject bacteria are characterized by having a mutation which modulates the expression of a multidrug resistance transporter.

## SUGGESTED USES

- » delivery vectors for introducing macromolecules into a cell
- » vaccines for eliciting or boosting a cellular immune response

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## OTHER INFORMATION

### CATEGORIZED AS

- » **Medical**
- » Delivery Systems
- » Vaccines

### RELATED CASES

2007-025-0