
# Bacterial Transcription Enhancers

**WARF: P99238US**

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**The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a way to increase gene expression from promoters in bacteria.**

## Overview

Bacterial production of recombinant proteins is used commonly by researchers and commercial entities to manufacture a large variety of proteins.

## The Invention

UW-Madison researchers have developed a way to increase gene expression from promoters in most or all bacterial systems. More specifically, the researchers created a means to increase the rate of transcription initiation from a bacterial promoter by fusing a DNA sequence containing an alpha subunit RNA polymerase binding site to the promoter upstream of the sigma subunit of RNA polymerase binding site. The resulting DNA sequence causes RNA polymerase to bind to the promoter more efficiently, without the need for transcription factors.

## Applications

- Increasing gene expression from promoters in most, if not all, bacterial systems

## Key Benefits

- Given that the DNA-binding determinants of the alpha subunit are conserved in nearly all bacteria, this method of increasing transcription should be functional in most or all bacterial systems.
- As many as 12 bacterial strains are available.

## Additional Information

**For More Information About the Inventors**

- Richard Gourse

**Tech Fields**

- Research Tools : Other research tools

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854