



Probiotic Strain Collection to Study Prophages

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Inventors: Jan Peter Van Pijkeren, Jeehwan Oh

The Invention

UW-Madison researchers have developed a number of variants of lytic strain *L. reuteri* $\Delta\phi1\Delta attB1\Delta\phi2\Delta attB2$ (WARF case P170020). They are:

1. *L. reuteri* $\Delta\phi1$, in which prophage #1 is deleted from the WT strain;
2. *L. reuteri* $\Delta\phi2$, in which prophage #2 is deleted from the WT strain;
3. *L. reuteri* $\Delta\phi1\Delta\phi2$, a strain that is isogenic to *L. reuteri* $\Delta\phi1\Delta attB1\Delta\phi2\Delta attB2$, in which both prophages #1 & #2 are deleted and then each *attB* site was restored; and
4. *L. reuteri* $\Delta\phi1\Delta\phi2::\phi1\phi2$, a complemented strain in which prophage #1 & #2 were restored in the genetic background of *L. reuteri* $\Delta\phi1\Delta\phi2$.

Applications

- Provides a unique and novel system for studying, manipulating, and researching prophages in different ecological systems
- Research tools and strains that can be utilized in the gut microbiome ecosystem

Additional Information

For More Information About the Inventors

- [Jan Peter Van Pijkeren](#)

Tech Fields

- [Research Tools : Cell lines](#)
- [Research Tools : Microbial technologies](#)

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847