April 14, 2015

Genetic Construction Report: J-15-[redacted]-[redacted], -17, [redacted]

Analyst: Mark Segal, Ph.D.

[redacted]

Submitter:

[redacted]

Introduction:

[redacted]

These [redacted] strains have the following phenotypes:

[redacted]

Uses: [redacted]

Parent or Recipient Microorganism: The starting strain for all microorganisms covered by this consolidated MCAN is the wild type [redacted]

Genetic Modifications: Intergeneric genes included:

Gene	Donor Organism	Source
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]		[redacted]
[redacted]	[redacted]	

were used during intermediate construction steps but not left in MCAN strains.

Some of these genes are derived from sequences from various *s* species, and, while all have been chemically synthesized, they may qualify as intrageneric.

Construction Process.

Plasmids:

[redacted]

[redacted]

Plasmid maps [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

d

[redacted]

[redacted]

[redacted]

[redacted].

Multiple Copies of introduced genes

[redacted]

[redacted]

Production Volume

[redacted]

General Conclusions.

The [redacted] strains are all intergeneric [redacted] Some have additional genes [redacted]. All antibiotic resistance genes are removed once the insertions take place. The description of each construction process is complete.