Construct a Bug
Gene Profile

Environmental protection genes

TviA
Involved in capsule production protecting bacteria from environmental factors

MprA
Involved in capsule production protecting bacteria from environmental factors

SptP
A protein released into hosts that suppresses the immune system

Toxin defence genes

KPC-2
An enzyme that breaks down penicillin based antibiotics

CcpA
Removes toxins produced from radiation

OqxB
Removes chemical toxins from the bacteria

MexF
Pumps chemicals like antibiotics out of the bacteria cells

Lifestyle genes

MtrC
A molecular wire that discharges electrons (essentially making electricity)

AtpA
Part of the system that releases energy for cells to live and function

PrgI
Forms a needle-shaped structure that injects effector proteins into host cells

Community genes

FlhA
Makes flagella (a tail) that allows the bacteria to move in its environment

IpfC
Enables bacteria to colonise the gut

LuxS
Allows bacteria to sense how many of there are in an area (quorum sensing)

BpfA
Helps bacteria stick together in biofilms