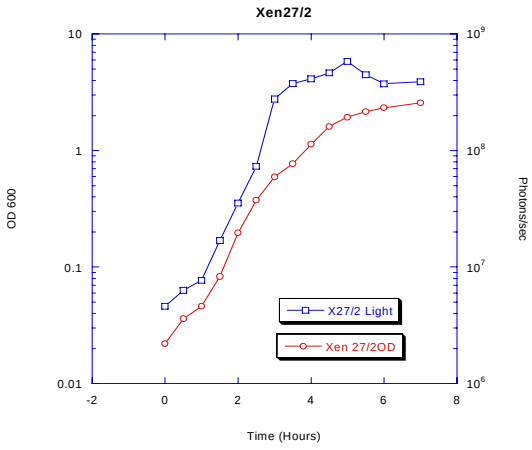
Bioware™ Microorganism – *Shigella dysenteria* Xen27
In vitro Characteristics

Genetic Characteristics
Shigella dysenteria–Xen27 was derived from the parental strain *S. dysenteria* 88A 6205, a clinical isolate from California Department of Public Health. *S. dysenteria*-Xen27 possesses a stable copy of the *Photorhabdus luminescens lux* operon on the bacterial chromosome. Xen27 should be stored at -80°C

Growth Characteristics
S. dysenteria-Xen27 grows well in Luria Bertani (LB) medium at 37ºC under ambient aeration. *S. dysenteria-Xen27* may also be grown selectively on LB agar containing 30µg/mL kanamycin.

Colonial Morphology
On LB plates, *S. dysenteria*-Xen27 appears as small (1.5mm), cream, smooth, circular colonies after 24 hours incubation at 37°C.

Growth Curve
Log-phase growth can be achieved after 1 to 2.5 hours of subculture in LB broth at 37ºC, shaking at 200 rpm. For the above broth culture conditions, an absorbance measurement at 600nm (against a LB blank) of 1.0 is roughly equivalent to $3.2x10^8$ cfu/mL of *S. dysenteria*-Xen27 and the relative light intensity is 10.3 photons/sec/cell..



Biochemical Profile
A biochemical profile was obtained for *Shigella dysenteria*-Xen27 using the api 20E system available from bioMérieux.

Sugar Fermentation /Oxidation	
Glucose	+
Mannitol	-
Inositol	-
Sorbitol	-
Rhamnose	-
Sucrose	-
Melibiose	-
Amygdalin	-
Arabinose	-

Other Tests	
β-galactosidase	-
Arginine Dihydrolase	-
Lysine Decarboxylase	-
Ornithine Decarboxylase	-
Citrate Utilization	-
H2S Production	-
Urease	-
Tryptophan Deaminase	-
Indole Production	-
Voges Proskauer	-
Gelatinase	-
Oxidase	-

Antibiotic Susceptibility
Disk Diffusion Data
Disk diffusion tests were performed according to methods outlined in the NCCLS Approved Standard M2-A7.

Kirby-Bauer Disk Diffusion Test	
Sensitive to:	**Resistant to:**
Ampicillin 10	
Carbenicillin 100	
Chloramphenicol 30	
Sulfamethoxazole/ Trimethoprim	
Tetracycline 30	

Contact Information:
If you have any questions regarding these cell lines, please contact Caliper at 508-497-6592 or e-mail: reagents@caliperls.com