

SUEZ Introduces the Next Generation of Endotoxin Detection with Sievers Eclipse BET in Asia

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SUEZ has unveiled the Sievers Eclipse* Bacterial Endotoxins Testing (BET) Platform, a groundbreaking analytical instrument that simplifies assay setup while meeting global regulatory requirements. Through innovative design, the Eclipse platform significantly decreases pipetting steps, reduces operator-to-operator variability, and increases laboratory efficiency.



The BET platform also empowers users to be conscious of today's needs to protect valuable resources by drastically reducing use of the sensitive endotoxin reagent derived from horseshoe crab blood by 90%.

"The Eclipse BET platform is a major advancement that enables lab professionals to be compliant, consistent, and environmentally conscious," said Kevin Cassidy, executive vice president of engineered systems for SUEZ – Water Technologies & Solutions. "Eclipse BET offers faster results, efficient and simplified operations, and a sustainable use of valuable natural resources without sacrificing analytical performance."

Eclipse BET is the latest addition to [SUEZ's Sievers line of analytical instruments](#), which now offers three out of the four compendial water tests in the ultrapure water market.

A lysate derived from the blood of horseshoe crabs (HSC), Limulus Amebocyte Lysate (LAL), is used in the vast majority of bacterial endotoxin tests. By decreasing LAL use by up to 90%, the Eclipse BET reduces the demand on the most sensitive and unmatched natural endotoxin detection reagent on the planet.

The heart of Eclipse BET is the Eclipse microplate, a precision-crafted microfluidic liquid handling device designed to significantly streamline kinetic chromogenic assays by automating test setup without the complexity of robotics. In conjunction with the Eclipse analyzer and software, the microplate uses centrifugal force and pneumatic chambers to measure and evenly distribute precise amounts of LAL reagent water, samples, and LAL across 104 optical wells.

Because of its unique design, operators can perform 21-sample tests with just 27 pipetting steps, compared to 200 or more steps typical with current technology, and requires just 1 mL of LAL instead of 9.6 mL needed for other solutions. The Eclipse platform is so efficient that assays with 21 samples can be started in as little as 9 minutes, with sensitivity down to 0.005 EU/mL. The Eclipse platform also maintains full compliance with USP <85>, EP 2.6.14, and JP 4.01; as well as data integrity guidelines and 21 CFR Part 11.