Ozone Control Systems for Microarray Laboratories

Ozone is a by-product of industrial pollutants that can destroy cyanine and other fluorescent dyes used with microarray samples. Studies have shown that ozone levels in ambient lab air as low as 20 ppb can negatively affect array data. Eliminating ozone is essential to assay reproducibility. Other studies show that dyes are particularly sensitive to ozone during post-hyb processing and during extended wait times in laser scanners. Degraded dyes can lead to varying results, confounding patient diagnostic outcomes.

NoZone Workspaces are a reliable solution for controlling ozone during microarray washing and scanning. NoZone Workspaces are bench top enclosures with external, high efficiency ozone filtration systems that provide clean, ozone-safe, low light spaces for microarray work. SciGene provides three workspaces that maintain ozone levels below 5 parts per billion (ppb).

**For Research Use Only**

- Protects sensitive fluorescent dyes
- Eliminates costly re-tests due to ozone damage
- Sets up easily from pre-assembled panels
- No filters to replace
- Ozone Filtration Performance Certificate included

**Success Story**

“After moving the company to a location near the railroad lines in 2007, we began experiencing problems with our array data. We ultimately traced the problem to high levels of ozone in the lab from air pollution caused by the frequent trains that passed by. Fortunately, SciGene easily solved the problem by providing us with bench-top NoZone Workspaces to filter out the ozone. Our work with SciGene ultimately resulted in a joint publication on the effects of ozone on microarrays (J. Mol. Diagnostics 11;509 (2009).”

- Lisa Shaffer, Ph.D., FACMG, President
  Signature Genomic Laboratories from PerkinElmer, Spokane, WA

**Related Products**

- **NoZone® WS Workspace**
  Use with the Little Dipper Processor or for manual sample preparation and slide processing.
  Outside: 25 x 46 x 29 inches (64 x 117 x 74 cm)
  Inside: 24 x 44 x 26 inches (61 x 112 x 66 cm)
  Cat. #1090-13-3

- **NoZone® TL Workspace**
  Use with Agilent or Roche NimbleGen microarray scanners or other equipment.
  Outside: 44 x 41 x 28 inches (112 x 104 x 71 cm)
  Inside: 42 x 40 x 26 inches (107 x 102 x 66 cm)
  Cat. #1090-11-3

- **NoZone® GP Workspace**
  Use with the GenePix Scanner Models 4000A/B, 4200AL or other small equipment.
  Outside: 22 x 21 x 29 inches (56 x 53 x 74 cm)
  Inside: 21 x 20 x 28 inches (53 x 51 x 71 cm)
  Cat. #1090-12-3

**References**