Technical Tip # 22

Related To: ZEUS AtheNA Multi-Lyte® Test System

Subject: How to test for carry-over on the AtheNA Multi-Lyte system

**Background:**

It may be necessary at times to perform a carry-over study on the AtheNA Multi-Lyte system. Below is a procedure that dictates the necessary steps to do so.

**Instructions:**

1. Set up the assay as directed in Package Insert (dilute controls and samples 1:21)
2. Choose the same high positive sample to use for wells E1, F1, G1, H1, A2, & B2. Below is an example of how the plate set up should be if running the ZEUS AtheNA Multi-Lyte® ANA-II Plus Test System.

**NOTE**: the carry-over procedure can be run on any ZEUS AtheNA Multi-Lyte® Test System, just make sure to set up the controls accordingly, followed by six wells of a strong positive.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| A | NC | POS |  |  |  |  |  |  |  |  |  |  |
| B | PC 1 | POS |  |  |  |  |  |  |  |  |  |  |
| C | PC 2 |  |  |  |  |  |  |  |  |  |  |  |
| D | PC 3 |  |  |  |  |  |  |  |  |  |  |  |
| E | POS |  |  |  |  |  |  |  |  |  |  |  |
| F | POS |  |  |  |  |  |  |  |  |  |  |  |
| G | POS |  |  |  |  |  |  |  |  |  |  |  |
| H | POS |  |  |  |  |  |  |  |  |  |  |  |

**Instructions cont.**

1. When transferring dilutions to the ZEUS AtheNA Multi-Lyte® filter plate, transfer 50uL of mixed beads into all wells **except** F1, H1, & B2.
2. Transfer 10uL of diluted samples onto filter plate.
   * wells F1, H1, & B2 will **only** contain 10uL of dilution. The idea is to alternate the 6 wells containing the positive sample with and without beads.
3. Run the test as directed in the package insert.

**What to expect**:

* The wells containing beads will all be positive. In this example, wells E1, G1, and A2.
* The wells where beads were not transferred will read as INV. In this example, wells F1, H1, and B2.
* If you look at the beads detected in the Luminex CSV files, there will be very few, if any beads detected showing no carry-over.

If you have any questions, please contact ZEUS Scientific Technical Support at (908) 526-3744 (option 2) or via email at support@zeusscientific.com.