Streamline ELISA kit manufacturing:

Master challenges with high-throughput microplate washing and coating

Plate coating (or ELISA coating) refers to the means of immobilization of antigen, antibodies, or any other compound on the well surface of a microplate for the purpose of a binding assay.



A TYPICAL PLATE COATING WORKFLOW



EACH STEP OF THE WORKFLOW HAS ITS OWN DEMANDS

Plate coating is typically applied to many plates at a time and high throughput is often required. The following workflow steps are often the most time-consuming:





Plate washing



Transfer/stacking of plates between steps



Waste management



Setup and Shutdown

HANDLING OF DIFFICULT LIQUIDS AND REAGENTS

There is a need to prevent needle clogging and crystallization during the plate coating process which can result from reagents with salt, sugar, or protein.

Using reagents with detergents or high protein can also lead to foam build-up.



The residual volume inside microplate wells is often located In droplets close to the corners of the well walls.



ACHIEVING LOWER RESIDUAL VOLUMES

Crosswise aspiration does a good job at removing those droplets. However, with some liquids, some droplets can be left out of the reach of crosswise aspiration.

How to overcome these challenges in your plate coating applications

Designed around many of the requirements highlighted above, the Zoom HT Plate Coating System is **reliable, robust, easy-to-use,** and positioned for **high-throughput** applications.

THE FASTEST PLATE WASHER

The Zoom HT takes only 17 seconds for a triple wash of a 96-well microplate.

With a stacker that efficiently moves the plate quickly from a stack to a wash position and a self-emptying liquid trap, which removes the need to stop the plate coating process to empty waste containers, the system is designed to **reduce maintenance** and **increase throughput.**



RELIABLE HANDLING OF DIFFICULT REAGENTS WITH CONFIDENCE Automated clean-out routines, the continuous addition of antifoam reagent to the liquid waste trap, and the ability to **optimize dispense position and speed** make the Zoom HT ideal for handling troublesome reagents.

CIRCULAR ASPIRATION ENABLES EVEN LOWER RESIDUAL VOLUMES

The Zoom HT is designed to achieve **low residual volumes** due to the 3D-positioning of aspirate needles



and the unique, reliable vacuum system used.





This is coupled with the new **circular aspiration** function where the aspiration needles follow a circular path, preventing droplets around the corners of wells.

DISCOVER A DISPENSE MODULE WITH LOW DEAD VOLUME

The optional Dispense Module adds reagents with **high precision.** The **low priming volumes** the module offers helps save expensive reagents.





Learn more about how the Zoom HT Plate Coating System can streamline your workflow <u>here >></u>

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