

## Andrew+ Pipetting Robot for OligoWorks in $\mu$ Elution Plates

### EASY SAMPLE PREPARATION FOR ACCURATE AND ROBUST OLIGONUCLEOTIDE QUANTIFICATION

The greatest source of variability for LC-MS bio-analytical assays are the sample preparation steps needed to extract a drug and its metabolites from biofluids. The challenge of achieving consistent results is especially true for oligonucleotides sample preparations as these methods require skilled and experienced scientists to properly develop, optimize and implement them. With Oligonucleotide Therapeutics (ONTs) becoming a focus for many drug developers, there is a growing need to achieve sensitive, accurate, precise and robust oligonucleotide quantification assays.

OligoWorks™ WAX SPE Kits from Waters are designed to streamline the extraction and quantitative analysis of oligonucleotide therapeutics from biological matrices. Automating this process for  $\mu$ Elution plates with the Andrew+™ pipetting robot takes this even further by providing many key benefits:

- A one-stop-shop for both top of the line chemistry and streamlined automation that work hand in hand
- A robust, easy to implement, « click and execute » automation method for quick configuration with Dominos and Connected Devices that works effectively across a wide range of oligotherapeutics
- Automation-friendly, detergent free workflow that eliminates foaming and extensive washing steps
- Fully automated SPE steps utilizing the Extraction+™ Connected device, thus removing the burden of tedious, manual operations while ensuring reproducibility
- Up to 2X increase in recovery with better reproducibility when compared to leading competitor

#### Chemistry Kit Part Numbers Relevant to Automated $\mu$ Elution Plate Methods

186010614	OligoWorks Microplate-2 mg/well-KIT
186010610	OligoWorks SPE Eluent 25 mL
186010611	OligoWorks SPE Eluent 125 mL (5 x 25 mL)
186010601	Rapizyme Proteinase K Digestion Module*
186010618	OligoWorks Microplate-2 mg/well

*\*With the dead volumes inherent to automation, we highly recommend purchasing additional Proteinase K Digestion Modules as needed for your automated workflows.*



## OLIGOWORKS ONELAB™ CLOUD LIBRARY PROTOCOLS FOR μELUTION PLATES

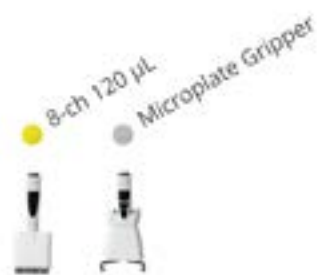
Automation of the OligoWorks WAX SPE kit for μElution plates is adapted into two separate OneLab Cloud Library protocols for maximum flexibility.

### OLIGOWORKS AUTOMATED DIGESTION METHOD

The OligoWorks Automated Digestion Method automates the sequential addition of Guanidine, TCEP and Proteinase K to up to 96 samples in a μElution plate for preparation and digestion of samples prior to SPE. The Andrew+ robot utilizes the Microplate Gripper tool in conjunction with the Heater-Shaker+ device to streamline the sample preparation while ensuring consistent results. Only one manual step is required to cap the digestion plate prior to incubation on the Heater-Shaker+ device.



Position	Dominos and connected devices
1, 2	Tip Insertion System Domino
3	Deepwell Domino
4, 5	8-Channel Reservoir Domino
6	Plate Heater-Shaker+



### 176005357 - A+ OligoWorks Digest-configuration

186010426	Plate Heater-Shaker+ Device w/ Deepwell Plate Adaptor
186009605	8-channel 5-120 μL Connected Pipette
186009776	Microplate Gripper Tool
186009613	8-channel reservoir Domino
186009597	Deepwell Microplate Domino



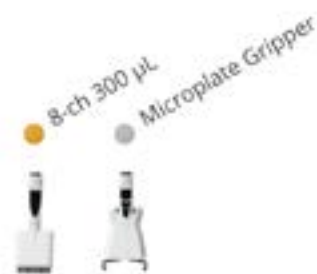
Use the two Tip Insertion System Dominos included in the Andrew+ Start-up kit to complete your setup

### OLIGOWORKS AUTOMATED SPE METHOD

The OligoWorks Automated SPE Method utilizes the Extraction+ device in conjunction with the Microplate Gripper tool to fully automate the loading, washing and elution steps required for streamlined SPE following sample digestion. Consistent dilutions are then achieved by automatically transferring the collection plate to the Heater-Shaker+ for homogenization prior to analysis.



Position	Dominoes and connected devices
1, 2	Tip Insertion System Domino
3, 4	Deepwell Domino
5	Extraction+
6	Plate Heater-Shaker+



#### 176005358 - A+ OligoWorks SPE-configuration

186010426	Plate Heater-Shaker+ Device w/ Deepwell Plate Adaptor
186010524	Extraction+ Pump and Manifold
186010525	Extraction+ Manifold Collar
186010527	Manifold Collar Lifter for Extraction+
186009597	Collection Plate Spacer Kit
186009776	Microplate Gripper Tool
186009607	8-channel 10-300 µL Connected Pipette
186009597	2x Deepwell Microplate Dominoes



Use the two Tip Insertion System Dominoes included in the Andrew+ Start-up kit to complete your setup

# Waters™

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