

Cocktail. Automated. No pipetting.

One panel in. Cocktail and controls out. Ready to stain.

KEY HIGHLIGHTS

72 antibodies / run 0 hand pipettings 1 instrument · end to end

FUNCTION	Automated antibody cocktail prep	VOLUMES	1 – 1000 µL per antibody
INPUTS	CSV panel definition LIMS-compatible via CSV exchange or manual input	VIALS	All common vial types. Any supplier
OUTPUTS	Master mix + FMOs + SCCs + run log; LIMS-compatible via PDF	SETUP	5– 15 min scales with panel size
CAPACITY	Up to 72 antibodies per cocktail run	COMPLIANCE	21 CFR Part 11
PRECISION	CV < 4% @ 5 µL · < 1% @ 200 µL	HANDS-OFF	Sample staining + wash automated, same Pluto Workstation

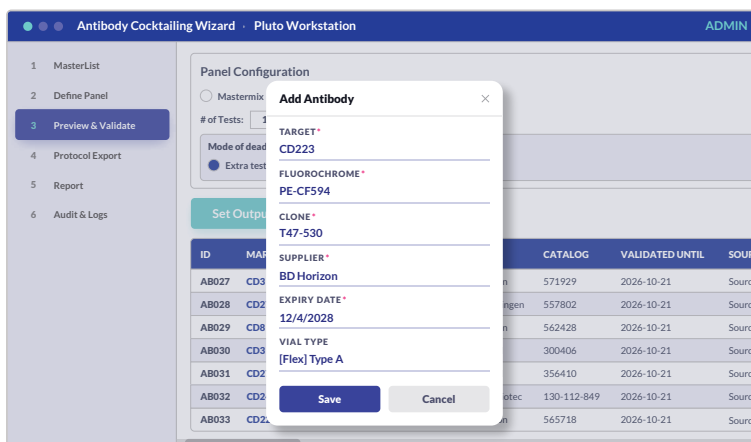
IN THE FULL WORKFLOW



THE SYSTEM

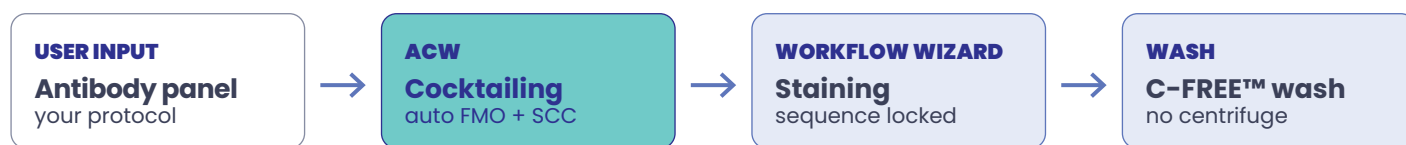
The complete sample-prep workflow on one instrument.

Cocktailing, staining, and centrifuge-free washing – on a single Pluto Workstation. The Antibody Cocktailing Wizard (ACW) prepares the master mix and controls; the Pluto Workflow Wizard picks up for staining and wash.



Stage 3 • Preview & Validate – every antibody reconciled against your MasterList and checked for expiry, lot drift, and volume before a single drop is pipetted

PLUTO WORKSTATION • ONE DECK



C-FREE™ – Curiox’s pipette-driven wash technology that replaces centrifugation. Gentler on samples, reproducible across operators, and able to run on the same instrument as cocktailing and staining.

Capability	Manual	Other Cocktail Systems ¹	ACW • Pluto
End-to-end: cocktail → stain → wash	Separate steps	Cocktail only	✓ One instrument
Centrifuge-free workflow	—	—	✓ C-FREE™
Antibodies per cocktail	Operator limit	Up to 60	Up to 72
Auto FMO + SCC prep	—	—	✓
Lot mismatch detected pre-run	—	Library / audit	✓ Flagged for review
Walk-away automation	—	✓	✓
21 CFR Part 11 ready	—	Variable	✓

¹ Other cocktail systems = single-function automated cocktail preparation instruments. All comparison points sourced from publicly available product specifications.

HOW IT WORKS AND WHAT IT PRODUCES

Five guided stages. Four audit-ready artifacts.

Every antibody is defined once in your MasterList, then available for any panel you build. Your SOP becomes the protocol — no scripting, no re-validation — and every run produces the records compliance needs, automatically.

01	Import	Import your panel from LIMS via CSV exchange, build it by hand in the wizard, or pick it from your MasterList. New antibodies are added to your MasterList once — your on-instrument antibody catalog — then ready to reuse on any future panel.
02	MasterList check	Each antibody reconciled against your MasterList. Liquid-level detection (LLD) flags low vials before pipetting; lot mismatch or expired vials are flagged for review before the run starts.
03	Calculate	Volumes, dead-volume correction, and pipetting sequence auto-calculated and locked. Each protocol gets a unique Protocol ID — traceable to every run. Calculation errors eliminated.
04	Pipette	Review the deck layout preview to verify positions, then click run and walk away. The Pluto Workstation executes machine-controlled pipetting following the protocol. Sequence enforced, lot numbers logged — errors prevented before they occur, not flagged after.
05	Hand off to Workflow Wizard	Master mix, FMOs, SCCs, and the run log are ready for the Pluto Workflow Wizard. A brief deck reset (~5 min) reconfigures vials and labware for staining; the run continues on the same instrument.

EVERY RUN PRODUCES

<p>PRIMARY</p> <p>Master mix 1× per panel · dead-vol corrected · sealed, labeled CV < 4% @ 5 µL</p>	<p>CONTROLS</p> <p>FMO panel one per channel · autogenerated · lot-matched Dead-vol matched</p>	<p>CONTROLS</p> <p>Single-color controls per-channel · beads or cells · plate-mapped Ready for unmixing</p>	<p>RECORD</p> <p>Run log (PDF + CSV) lot, vol, sequence, panel ver., user sign-in, timestamp 21 CFR Part 11 ready</p>
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MEET THE WORKFLOW WIZARD

Where the Cocktailing Wizard ends, the Workflow Wizard begins.

The Workflow Wizard picks up where ACW leaves off — orchestrating every step from cocktail addition through C-FREE™ washing. It runs your validated staining SOP, reorganized into a table the instrument follows step by step. No programming. No re-optimization. ~1 day of operator training — no automation engineers needed. The SOP your lab already validated is the SOP the Workstation executes.

Sequence enforced

Operators can't skip or re-order steps. Wrong-sequence failure mode eliminated.

Incubation timed

Variability reduced to ±1 minute (internal validation, sensor log).

C-FREE™ wash, automated

Pipette-driven wash runs in the same sequence. No centrifuge. No handoff.

One run log

ACW's record + the Workflow Wizard's record merge into a single audit-ready trail.

THE PROOF · NEXT STEP



In antibody discovery and B-cell profiling, even small differences in preparation can influence rare clone detection and downstream interpretation. C-FREE™ Antibody Cocktailing Wizard standardizes cocktail preparation and workflow execution at a critical pre-analytical stage, increasing confidence that observed differences reflect biology rather than handling variability.

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HANDS ON TIME SAVINGS

Cocktailing Only

Manual:
~ 60–120 min



Pluto Workstation:
< 5 min

Saving:
~ 95% less

Full Workflow

Cocktail → Stain → Wash

Manual + Centrifuge:
~ 2.5–3.5 hr



Pluto Workstation:
~ 20 min

Saving:
~ 90% less

~ 250 min walk-away time per run · Stanford HIMC

PLATFORMS · ANTIBODY COCKTAILING WIZARD RUNS ON ALL THREE

Pluto LT

Staining Workflow Throughput

Up to 32 wells

Method dev · Lean teams



Pluto MT

Staining Workflow Throughput

Up to 72 wells

Core facilities · Routine



Pluto HT

Staining Workflow Throughput

Up to 96 wells

Biopharma · CRO · Multi-site



NEXT STEP

**See the Wizard
run your panel.**

01

**Schedule a
demo**

curiox.com/acw

02

**Talk to a
specialist**

curiox.com/contact

03

**See ACW + the
Pluto Workflow
Wizard live, on
your panel**

