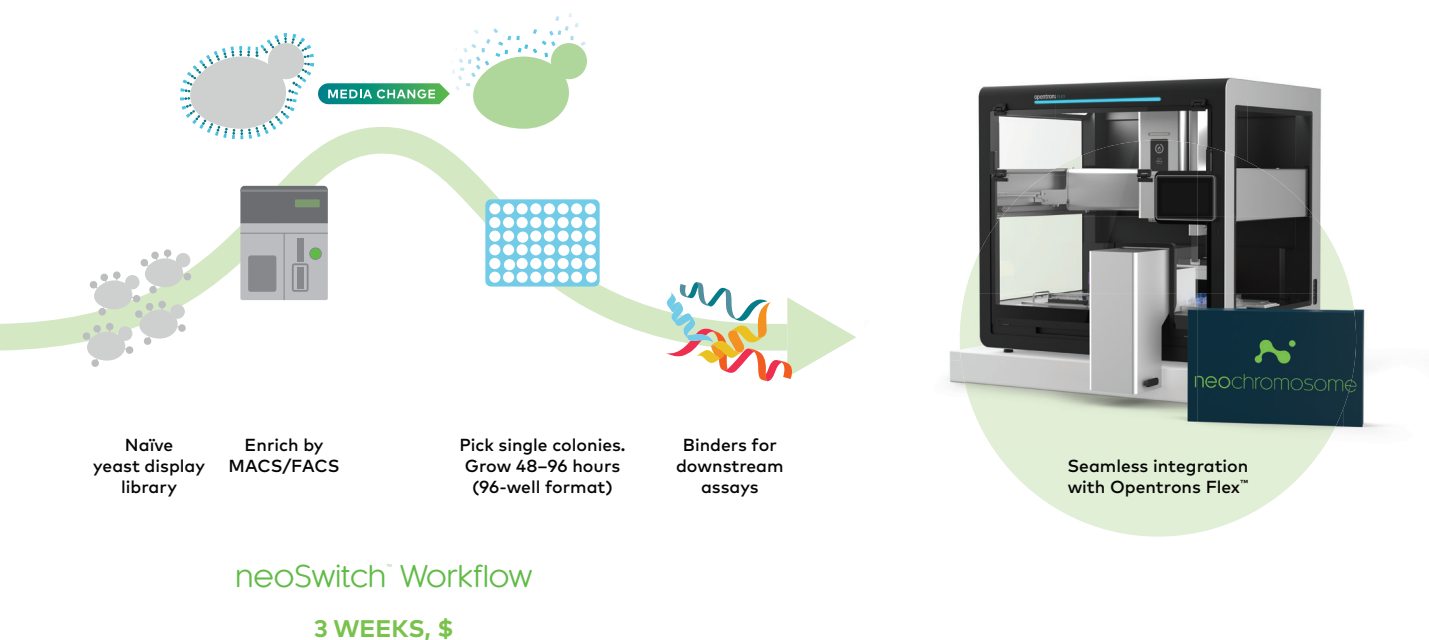# neoSwitch™

Part of Neo's Antibody Toolkit™

neoSwitch™ enables binder discovery and protein production in the same host under control of a chemical trigger, eliminating weeks of subcloning and protein expression in a secondary host to obtain soluble protein for characterization (SPR, ELISA etc). neoSwitch™ comes pre-transformed with high diversity libraries for "plug and play" yeast display workflows.

MEDIA CHANGE

| Naïve yeast display library | Enrich by MACS/FACS | Pick single colonies. Grow 48–96 hours (96-well format) | Binders for downstream assays | Seamless integration with Opentrons Flex™ |

neoSwitch™ Workflow

3 WEEKS, $

Screen, Subclone & Switch Hosts for Production

STANDARD WORKFLOW: >6 WEEKS, $$$$

The Opentrons Flex neoSwitch Workstation™ automates key steps of the neoSwitch workflow – including high-throughput purification of secreted binders, protein quantification, genotype identification in each clone via colony PCR and library preparation for sequencing. With pre-loaded, walkaway protocols and seamless integration of Flex's automation capabilities, labs can scale antibody discovery internally, with full control over their R&D pipelines.

neoSwitch™

Toggle between surface display and secretion to accelerate antibody discovery

FEATURES	DETAILS
% of population display	90% (superior to EBY100)
Pre-transformed libraries	Aliquots of yeast transformed with Neo's synthetic naïve VHH library or customer library at high diversity (e.g. 10^9)
Protein yield	5-60 ug/mL VHH, 10-100 ug/mL scFv
Protein production timeline	Obtain soluble protein from clones in 48-72 hours

Library Types

PRE-TRANSFORMED LIBRARY	DETAILS	TIME TO DELIVERY
Neo-Designed Synthetic VHH Library	Llama VHH library	Ships immediately
Customer-defined Library	Custom mutational schema	Subject to library build time
Existing Starting Material	e.g. cDNA from immunization, pre-existing library	Subject to library build time

Automation

FEATURES	DETAILS
neoSwitch Flex Workstation	Starting price: $50,650
Purification method	Ni-NTA magnetic beads
Throughput	One 96W plate processed in two hours, full walkaway

Join Neo's Ecosystem

Perform affinity maturation and humanization campaigns more rapidly by combining libraries delivered in neoSwitch™ with Neo's 3-day sequencing and rapid variant library construction.

HOW TO WORK WITH NEO

To get started, please reach out to **info@neochromosome.com**