

### Green Lab Product Database

Note: NIH does not endorse any product, company or information shared here.

Safer Chemical Alternatives	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Ethidium bromide	GreenGlo Safe DNA Dye	SYBR Safe DNA Gel Stain	Precast Ethidium bromide gels - reduces potential dye exposure			
Xylene	Histo-Clear					
Comassie Blue Stain- Methanol	SimplyBlue SafeStain - no methanol needed					
Mercury Therometer	Enviro-Safe Thermometers - liquid-in-glass thermometers without mercury					
Phenol/Trizol	TaqMan miRNA ABC Purification Kit - eliminates the use of phenol					
Energy and Space Savings						
Ultra low temperature (ULT) Freezers	Stirling SU780XLE ULT Freezer - does not use a compressor, which means less failure points	Panasonic Energy Star ULT Freezers	Panasonic Dual-Compressor ULT Freezers - able to run on a single compressor in case of failure, which saves samples and makes repairs less time-sensitive			
Computers	Dell Energy Star Monitors	Dell Ultrasharp U2419HC Monitor - Arsenic-free, Mercury-free panel				
Mini Lab Items and Equipment - saves space, energy, reagents, etc.	Thermo Fisher E-gel Precast Gel System - small electrophoresis system for benchtop use	Thermo Fisher Nanodrop One C Microvolume UV/Vis Spectrophotometer	Denovix DS-11 Spectrophotometer	Protein Simple Jess Automated Western Blot System	Thermo Fisher 3500XL Genetic Analyzer for DNA Sequencing	
Pipette Tip Refill Systems - save space and use less plastic	Rainin Refill Racks - boxes that can be refilled and reused					
Traditional Office Printer	Epson Ecotank Printer- cartridge-free printing					
Tissue Culture Media Storage - alternatives to storing at 4 °C	Thermo Fisher Tissue Culture Media - room temperature storage					
Microscopes - Halogen bulb alternatives	Thermo Fisher EVOS LED Microscope Bulbs					
Water Baths	Labconco Lab Armor Beads to reduce water usage					
RT-PCR	Thermo Fisher ViiA 7 Real-Time PCR System - saves time, reagents and energy					
Lab and Freezer Inventory/Database	Saves time and energy while looking for samples or items within a freezer					
Reuse						
Solvents - available via the NIH Solvent Recovery Program	Xylene	Methanol	Formalin	Ethanol	Histo-Clear	
Conical Tube Racks	Plastic Racks - can be reused, unlike Styrofoam					
Miscellaneous items - available via the NIH Free Stuff	Lab equipment, office furniture, appliances, etc.	Unused and unexpired chemicals	Subscribe to the Lab Managers Listserv to stay informed of available items. Also, IC property managers can notify their IC staff of available equipment and supplies, especially when a lab closes	NIH Surplus offers decent equipment to other NIH labs, government agencies, schools, universities, and non-profit organizations	Encourage vendors to offer old items as a refurbished model or to donate them to schools, universities, and non-profit organizations	
Shipping Materials	Styrofoam inserts and cardboard boxes can be used in the lab for shipments, moving, or storage (e.g. copier paper boxes with lids)	Soft plastic packing bubbles and packing paper	Ziploc bags used to hold lab supplies (all sizes)	Ice bricks and blue ice packets - can be frozen and reused as needed		
Recycle						
Solid Waste	Soft plastic film	Pipette tip boxes	Uncontaminated paper	Reuse plastic containers		

Chemical Waste	Empty chemical bottles	Batteries				
Paper Waste	Use scrap paper for planning, to do lists, temporary signs, and calculations	Add a paper and cardboard recycling bin in the lab				
Shipping materials	TemperPack Insulation - recyclable and Styrofoam-free					
<b>Styrofoam recycling</b>						
Offers methods to return Styrofoam to shippers for reuse	New England Biolabs	Thermo Fisher	Sigma	Life Technologies		
<b>Digital Imaging</b>						
Switching from Dark Room Photography to Digital Imaging	Odyssey Imaging System from LiCOR Biosciences	Digital Imaging from Azure Biosystems	iBright Imaging System from Thermo Fisher	ChemiDoc MP Imaging Systems from Bio-Rad	Digital Imaging from Syngene	
<b>Lab Notebook Alternatives</b>						
Products from environmentally-friendly items to digital notebooks	Stone Notebooks from the NIH Self Service Store - completely tree-free, made from natural calcium carbonate, limestone and HDPE plastic	CERF electronic notebooks from Lab Ally, Inc.	Use a laptop or tablet to take notes during lectures, meetings, and brainstorming sessions instead of paper	LabArchives electronic notebook		
<b>Cleaning Supplies</b>						
Environmentally-friendly Soaps and Other Cleaning Supplies	Purchase Gojo Multi Green Hand Cleaner from the NIH Self-Service Store	Purchase paper towels that are made from recycled materials from the NIH Self-Service	Peroxigard cleaner and disinfectant - decomposes into oxygen and water, leaving no chemical residue			