

## Risk Assessment: PureYield Plasmid Midi Prep

### Scope

The PureYield™ Plasmid Midiprep System is designed to isolate transfection-quality plasmid DNA. The system provides a rapid method for purification of 100–200µg of plasmid DNA from 50ml bacteria culture. Purification is achieved without isopropanol precipitation of purified plasmid DNA or extensive centrifugation, providing rapid purification from a single method

It is the users responsibility to ensure what controls are needed to ensure that the health of themselves and others around them. It is imperative that you **DO NOT** start any work until you are absolutely sure of the appropriate precautions that need to be employed. If you are unsure seek advice from your line/laboratory manager or your departmental safety officer (DSO).

*This replaces VI-RA-013*

<b>Name of assessor:</b>	Tiphaine Bouriez-Jones	<b>Date of Assessment:</b>	May 2015	<b>Review Date:</b>	Every 3 years
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**Risk Matrix:**

Risk Matrix		Likelihood			
		High	Medium	Low	Negligible
Consequence	Severe	High	High	Medium	Effectively Zero
	Moderate	High	Medium	Medium/low	Effectively Zero
	Insignificant	Medium/Low	Low	Low	Effectively Zero
	Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

**Risk Assessment:**

Hazard (Cause and consequence)	Affected Groups	Existing controls	Risk	Further Action
<p>Infection from exposure to pathogens</p> <ul style="list-style-type: none"> <li>- Via direct contact with the pathogen (i.e. skin adsorption from splash)</li> <li>- Via spill of material</li> <li>- Via incorrect disposal of waste</li> </ul>	<p>Staff Students and visitors</p>	<p><b>CL3 biological agents</b></p> <p>Only trained users who have shown evidence of their experience to the CL3 Safety Officer will have access to the CL3 suite out of hours.</p> <p>Each user is trained to adhere to the CL3 Code of Practice, they will follow the precautions involved with handling and storing pathogens.</p> <p>Every user must double glove, wear a leak-resistant disposable gown and wear safety spectacles whilst working in the suites.</p> <p>The use of sharps is forbidden in the CL3 suites.</p> <p>Out of hours workers must at least have a buddy system in place or work in pairs.</p> <p>Users are familiar with emergency procedures and a spill drill is implemented as a check on measures.</p> <p>A telephone available in each CL3 suite, with up-to-date list of emergency contact details next to it.</p> <p>Waste is autoclaved within the suite, samples will be packaged in tertiary container if they need to be taken outside of the CL3 suite.</p> <p>No engineer is allowed to work out of hours in the CL3 suite.</p>	<p>Medium</p>	<p>Bi-yearly checks on the BSC within CL3</p> <p>Yearly checks on BSC in CL2</p>

		<p><b>CL2 biological agents</b> Users are trained to follow good microbiological practice. They must wear blue labcoat, nitrile gloves and safety spectacles at all time whilst working in CL2.</p> <p>Procedures in case of spill or exposure policies are explained at induction and the policies are displayed in the CL2 laboratories.</p>		
<p>Exposure to chemicals</p> <p><b>Cell lysis solution</b> H315 Causes skin irritation. H319 Causes serious eye irritation.</p> <p><b>Neutralisation solution</b> H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation</p> <p><b>Endotoxin removal wash</b> H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.</p>	Staff, students and visitors	<p>Users are trained and instructed on the safe use and storage of chemicals. Via Inhalation: Stock only be available in solution. Via skin adsorption: User must wear gloves and labcoat at all time. Via instillation (eye): User must wear safety spectacles at all time.</p> <p><b>See specific COSHH risk assessment for each chemical.</b></p>	Low	None
Injury due to misuse or faulty equipment	Staff Students and visitors	All users are trained in the correct operation of instruments. Specialised equipment such as centrifuges and incubators are under maintenance service contract.	Low	Incubators and centrifuges serviced yearly

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: