

<b>iGEM2014 – Microbiology – BMB – SDU</b>	
<b>Title:</b>  <b>SOP number:</b> SOP0014_v01  <b>Version number:</b> 01	<b>Date issued:</b> 2013.06.19  <b>Review date:</b>  <b>Written by:</b> HWJ

### 1. Purpose

Purify sample from gel

### 2. Area of application

Purifying gel samples

### 3. Apparatus and equipment

Apparatus/equipment	Location (Room number)	Check points	Criteria for approval/rejection
<b>Pipettes (p1000)</b>		•	
<b>Purification kit (GE healthcare)</b>	Laboratory (class 1) - V18-403b-2	•	
<b>Table centrifuge</b>	Laboratory (class 1) - V18-403b-2	•	

### 4. Materials and reagents – their shelf life and risk labelling

Name	Components	Supplier / Cat. #	Room (hallway storage)	Safety considerations
<b>Blue pipette tips</b>		Contact lab-manager	Micro storage	
<b>Eppendorf tubes</b>		Contact lab-manager	Micro storage	
<b>500µl capture buffer</b>		GE healthcare	Kit	

<b>type 3</b>				
<b>Distilled water</b>		Contact lab-manager	Micro storage	
<b>GFX MicroSpin™ column and collectiontube</b>		GE healthcare	Kit	
<b>500 µl Wash buffer type 1</b>		GE healthcare	Kit	
<b>Piece of gel containing DNA</b>				
<b>Elution buffer(optional)</b>		GE healthcare	Kit	

## 5. QC – Quality Control

## 6. List of other SOPs relevant to this SOP

## 7. Environmental conditions required

## 8. Procedure

1. Add 500µl capture buffer type 3 to up to 100µl sample
  1. Mix thoroughly capture buffer type 3
  2. Check the color of capture buffer type 3, should be yellow/pale orange
  3. Place the sample with buffer in thermoblock at 60 deg C with light mixing
  4. Wait until the sample is completely diluted
2. Add the capture buffer/sample to the GFX MicroSpin column in the collectiontube
  1. Spin at 16.000 x g for 30sec and discard flow through
3. Add 500 µl Wash buffer to the GFX MicroSpin column in the same collectiontube
  1. Spin at 16.000 x g for 30sec and discard flow through
  2. Spin at 16.000 x g for 30sec and discard Microspin column
  3. Transfer GFX MicroSpin column to a clean 1.5 µl eppendorftube
4. Use 10-50 µl distilled water or Elution buffer type 4 or 6 to elute the DNA
5. Let the sample sit for 60 sec then Spin at 16.000 x g for 30sec and keep the flow through.
6. To get more product you can run the flow through, through the GFX MicroSpin column again.
  1. Pipette the flow through into the GFX MicroSpin column again, let it sit for 60 sec and spin at 16.000 x g for 30sec and keep the flow through.
7. The sample can now be stored

## 9. Waste handling

Chemical name	Concentration	Type of waste (C, Z...)	Remarks
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ONE use plastic		GMO	Yellow GMO Trash
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## 10. Time consumption

- Total-time 20min.

## 11. Scheme of development

Date / Initials	Version No.	Description of changes
13.06.19 / HWJ	01	The SOP has been written
13.06.26 / PRA	01	The SOP has been approved

## 12. Appendixes