

<b>iGEM2013 – Microbiology – BMB – SDU</b>	
<b>Title:</b> Restriction digest	<b>Date issued:</b> 2013.06.19
<b>SOP number:</b> SOP00012_v01	<b>Review date:</b> 2013.06.18
<b>Version number:</b> 01	<b>Written by:</b> ASF

## 1. Purpose

To digest DNA-pieces with restriction enzymes

## 2. Area of application

Cloning

## 3. Apparatus and equipment

Apparatus/equipment	Location (Room number)	Check points	Criteria for ap
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		•	
		•	
		•	
		•	
		•	
		•	

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

Name	Components	Supplier / Cat. #	Room (hallway storage)	Safety co
Purple pipette tips		Contact lab-manager	Micro storage	

<b>Green pipette tips</b>		Contact lab-manager	Micro storage	
<b>Eppendorf tubes</b>		Contact lab-manager	Micro storage	
<b>Distilled water</b>		Contact lab-manager	Micro storage	
<b>Fast digest green buffer</b>		Agilent Technologies	Freezer at 1. Floor	
<b>Enzyme 1</b>		Agilent Technologies	Freezer at 1. Floor	
<b>Enzyme 2</b>				
<b>PCR products</b>				

## 5. QC – Quality Control

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

## 7. Environmental conditions required

## 8. Procedure

1. Mix the reagents from the table below
2. Mix the restriction mixture in an eppendorf tube by pipetting up and down
3. Leave for 30 min. at 37°C (no shaking!)
4. Immediately load the restriction mixture in the gel
5. Run the gel and cut out and purify correct sized bands according to SOP0014.

<b>Reagents</b>	<b>µL</b>
Gel cut-out	X µL
Enzyme 1 ex. <i>ecoR1</i>	1 µL
Enzyme 2 ex. <i>pst1</i>	1 µL
Buffer	3 µL
Distilled Water	To total volume of 30 µL

## 9. Waste handling

Chemical name	Concentration	Type of waste (C, Z...)	Remarks

#### 10. Time consumption

#### 11. Scheme of development

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

#### 12. Appendixes