iGEM Protocols

Uppsala iGEM team 2025

June-August 2025

Contents

1 Introduction

1.1 Acknowledgements

Protocols ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ??, ?? and ?? were adapted with permission from Synthetic Biology: A Lab Manual; Josephine Liljeruhm, Erik Gullberg, Anthony C. Forster; Copyright © 2014 by World Scientific Publishing Co Pte. Ltd. https://www.worldscientific.com/worldscibooks/10.1142/9061#t=aboutBook

2 Protocols

2.1 Molding 1% agarose gel (150 mL)

Aim

Create gels that we can check our DNA fragments on.

Material

- Agarose
- 1x TAE
- Sybr Safe

Method

1. Weigh 1.5 g agarose in a 500 mL conical flask. Add 150 mL 1x TAE buffer.
2. Dissolve the agarose in the buffer, swirl to mix and microwave a couple of minutes.
3. Let the agarose solution cool down. Once it's touchable add 1x Sybr Safe, in our case 15 µL.
4. Pour the gel solution into a gel tray. Remove any air bubbles. Insert the comb.
5. Wait until the gel has solidified.