

Protocol for histochemical localization of GUS activity

(Sonal Roy May 2014 – Modified from Giulia Morieri 2010)

1. Prepare fresh sodium/potassium phosphate buffer. Add X-GlcA stock.
2. Immerse roots/seedlings in buffer. If checking root hairs use a forcep to gently push the root under the buffer to insure root hairs are covered in solution.
3. Wrap the petri dish with aluminium foil and place it in the 28 degree chamber.
4. Start checking for expression of GUS from 2 hours or leave overnight.
5. Wash with Z buffer/sterile water to stop reaction before imaging.

	COMPONENT	STOCK	REQUIRED	VOLUME (50 mL)
1.	Sodium Phosphate (pH7.4)	1M	50 mM	2.5 mL
2.	EDTA	0.5M	1 mM	100 uL
3.	Triton-X	-	1%	50 uL
4.	Water	-		47.150 mL
5.	X-GlcA	62.3 mg in 250 ul DMF	28 ul per 7 mL buffer	196 uL