**Whole Mount X-gal Histochemistry of Transgenic Animal**

**Procedure**

1. Remove tissue or fetus and fix in fresh 4% paraformaldehye/PBS (pH 7.0-7.5) for 1 hour at 4oC.
2. Rinse three times, for thirty minutes each, with rinse buffer (recipe given below) at room temperature.
3. Stain between 4 and 48 hours, typically overnight. About 90% of potential staining will occur in the first 24 hours.
4. Post-fix overnight in 10% formalin (10% formalin is fine because freshness isn't critical) at 4oC.

**Recipes**

* PBS:
	+ 100 mM sodium phosphate (pH 7.0-7.5)
	+ 150 mM NaCl
* Rinse buffer
	+ 100 mM sodium phosphate (pH 7.0-7.5)
	+ 2 mM MgCl2
	+ 0.01% sodium deoxycholate
	+ 0.02% NP-40
	+ Stable at room temperature for at least a year
* Staining solution
	+ Rinse buffer plus:
	+ 5 mM potassium ferricyanide, from 0.5 M stock stored at room temperature in the dark
	+ 5 mM potassium ferrocyanide, from 0.5 M stock stored at room temperature in the dark
	+ 1 mg/ml X-gal, from 25 mg/ml stock in dimethylformamide (DMF), stored at -20oC
	+ I always prepare it fresh from stock solutions.



Adapted from : <http://wmc.rodentia.com/>