

## Ascidian RNA extraction

Last modified by R.W. Zeller on 24 February 2011

- 1) Grow embryos at 18°C until desired time point. Pellet embryos in ~100 ul pellets.
- 2) Freeze at -80°C for up to six months if desired.
- 3) To a 100 ul embryo pellet, add 300 ul of homogenization buffer:

	<u>1 ml</u>	<u>3 ml</u>	<u>6 ml</u>
1M Tris pH 7.5	50 ul	150 ul	300 ul
5M NaCl	10 ul	30 ul	60 ul
0.5M EDTA pH 8.0	20 ul	60 ul	120 ul
10% SDS	50 ul	150 ul	300 ul
DEPC H2O	to 1 ml	to 3 ml	to 6 ml

- 4) Add 10 ul 20 mg/ml proteinase K
- 5) Grind in glass tissue homogenizer.
- 6) Transfer liquid to eppendorf tube on ice, rinse homogenizer with H2O and process additional samples if needed.
- 7) Phenol/Chloroform extract sample; phenol is saturated but unbuffered at a pH of about 6.
- 8) Transfer aqueous phase to new tube, add 300 ul homogenization buffer to phenol/chloroform and re-extract, combine aqueous layers.
- 9) Extract with equal volume chloroform.
- 10) Add 1/10 volume 3M NaOAC, pH 6, and 2.5 volumes of EtOH, ppt at -80°C.
- 11) Store RNA at -80°C until use.