

Sugden Lab.

### ***Preparation of total RNA***

- 1) Harvest  $1 \times 10^5$  to  $10^8$  cells. Wash 1x w/PBS and freeze in liquid  $N_2$  and store @  $-70^\circ C$
- 2) Resuspend each pellet in 1.5ml lysis buffer (300 $\mu$ l 5x Lysis, 75 $\mu$ l 200mM VR, 1.125ml  $H_2O$ )
- 3) Incubate on ice 5minutes and spin 20min at 8k at  $4^\circ C$ .
- 4) Add equal volume of 2x proteinaseK buffer and 30 $\mu$ l of 20mg/ml ProtK. (Final conc. 0.2mg/ml)
- 5) Incubate 30 minutes at  $42^\circ C$
- 6) Extract with 1-2 volumes of Phenol  $CHCl_3$ . Spin 10min at 8k at  $4^\circ C$ .
- 7) Repeat step 6 if interface is viscous.
- 8) Extract with 3mls of  $CHCl_3$  (Chloroform)
- 9) Add 2 $\mu$ l of glycogen and 2.5volumes ( $\sim 7.5$ ml) of EtOH. PPT at  $-70^\circ C$  or on dry ice.
- 10) Spin 10min at 8k at  $4^\circ C$  in swinging bucket Sorvall.
- 11) Wash w/70% EtOH and dry
- 12) Resuspend in appropriate volume of 1xTE (50-500 $\mu$ l)
- 13) Run on a 1% EtBr gel. (28s @ 4.8kb, 18s @ 1.9kb, 5s @ 160bp)

<b>5x Lysis</b>	<b>[Final]</b>	<b>2xPK buffer</b>
14ml 5M NaCl	140mM	20ml 1M Tris pH7.5 (10mM)
750 $\mu$ l 1M $MgCl_2$	1.5mM	5ml 0.5M EDTA
5ml 1M Tris pH 8.6	10mM	6ml 5M NaCl
2.5ml NP40	0.5%	10ml 20% SDS
78ml $H_2O$		59ml $H_2O$