RNA solubilization in formamide

NOTE 1: Resuspending RNA in formamide (Chomczynski, *Nucl Adids Res*) has several benefits over storage in ddH_2O or EtOH. First, formamide will protect the RNA from nucleases, allowing it to be stored at 4°C (or even RT°), although –20°C is generally used. Second. the samples can be concentrated up to 4mg/ml. Finally, the samples can be used immediately for northerns, RNase protection, or even RT-PCR.

NOTE 2: Formamide **NOT** formaldehyde (if you add the latter toss the sample – you just killed it)

From Acid-Phenol RNA extraction protocol (or likewise)

1. Precipitate RNA as usual. Spin to pellet. Wash with 75% EtOH (from -20°C) to remove excess salt. Aspirate EtOH (but do not overdry).

2. Resuspend pellet in 100% formamide (from 4°C). Try an equal volume of liquid to pellet first and move up from there. Most of the pellet should dissolve instantly. To aid solubilization allow to sit at RT° for 15 min with pipetting every 5 min. If sample is to be very concentrated, store at 4°C overnight.

3. Determine concentration by 1/100 in H_2O and $OD_{260/280}$ (OD_{260} 1 ≈ 40µg/ml for RNA). Remember to add formamide 1/100 to the blank.