

Gus Assay Protocol

Kimberly Nelson-Vasilchik, Joel Hague, and
Albert Kausch
The Plant Biotechnology Laboratory
University of Rhode Island
530 Liberty Lane West Kingston RI 02892



1. Stock Solutions

50mM $K_3Fe(CN)_6$ (50ml)

- Dissolve 0.823g in ~40ml H_2O
- Bring to final volume

*Note: Potassium ferricyanide (MW=329.25) should be stored in brown bottles at room temperature and should be made freshly each month. **Disposal**-Add an equal volume of Clorox and let stand overnight, then they may be washed down the drain with lots of water. Cyanides are toxic!*

$K_4Fe(CN)_6 \cdot 3H_2O$ (50ml)

- Dissolve 1.056g in ~40 ml H_2O
- Bring to final volume

Note: Potassium ferrocyanide (MW=422.1) see above note.

0.5M $Na \cdot EDTA \cdot 2H_2O$ (100ml, MW=372.2)

- Dissolve 18.61g in ~80 ml H_2O
- Adjust pH to 8.0 ~ ___g of NaOH. *Note: This is necessary to dissolve the EDTA).*
- Bring to final volume.

0.2M Monobasic NaH_2PO_4 (1L, MW=120)

- Dissolve 24g in H_2O and bring to final volume

0.2M Dibasic Na_2HPO_4 (1L, MW=142)

- Dissolve 28.4g in H_2O and bring to final volume

Sodium Phosphate Buffer (pH 7.0 by definition)

