Lysis of Red Blood Cells

Tris-buffered ammonium chloride

Stock solutions:

- 1. 0.16M NH4CI: 8.3g/liter (4.28g/0.5L)
- 2. 0.17M Tris (Hydroxymethy-aminomethane), pH 7.65: dissolve 20.6g Tris base in 900ml water (2.06g/100ml)
- 3. Adjust to pH 7.65 with HCL
- 4. Make up to 100ml

Working solution:

- 1. Mix 90ml of 0.16M NH4Cl and 10ml of 0.17M Tris, pH 7.65
- 2. Adjust to pH 7.2 with HCL (450ml NH4CL + 50ml Tris)

Lysis of red blood cells:

- 1. Pellet the cells and resuspend in Tris-NH4CL working solution (0.1ml packed cells/ml Tris-NH4Cl). Hold at room temperature for 2 minutes.
 - (For one spleen, use 2ml Tris-NH4Cl.)
- 2. Underlay the cells with FCS and centrifuge at 300g for 10 min.
- 3. Repeat the process if red blood cells are evident in the pellet.
- 4. Wash cells twice with RPMI 5% FCS.