APPENDIX

1 Tyrode: Dissolved (%; w/v) NaCl 0.8, KCl 0.02, CaCl₂ 0.02, NaHCO₃ 0.015, NaH₂PO₄ 0.05, MgCl₂ 0.01 and glucose 0.5 in DW.

2 NaCO₃-Copper reagent: Mixed 1 ml of alkaline copper solution (w/v; 0.5% CuSO₄ and 1%. Sodium potassium tartaurate in DW) to 50 ml of 2% NaCO₃ in 0.1N NaOH.

3 Polyacrylamide gel:

3.1 10% gel containing SDS: For 15 ml of gel, pipetted out (i) 4.95 ml 30:0.8 acrylamide-bisacrylamide solution, (ii) 3.75 ml 1.5 M Tris HCl PH 8.8, (iii) 0.75 ml 1% ammonium persulphate, (iv) 0.15 ml 10% SDS, (v) 5.4 ml DW and (vi) 10 μl TEMED from stock solutions into a beaker, mixed and used immediately.

3.2 3% gel containing SDS: For 10 ml of gel, pipetted out (i) 1.0 ml 30:0.8 acrylamide-bisacrylamide solution, (ii) 2.5 ml 0.5 M Tris-HCl pH 6.8, (iii) 1.0 ml 1% ammonium persulphate (iv) 0.1 ml 10% SDS, (v) 5.4 ml DW and (vi) 5 μl TEMED into a beaker, mixed and used immediately.

4 Tris-glycine electrode buffer:

4.1 For SDS-PAGE: 0.025 M Tris and 0.192 M glycine in DW containing 0.1% SDS.

4.2 For Non SDS-PAGE: 0.05 M Tris, 0.192 M glycine in DW.
**5 Sample buffer for SDS-PAGE:** For 8 ml, Mixed (i) 1.5 ml glycerol, (ii) 0.5 ml 0.5 M Tris-HCl pH 6.8, (iii) 2 ml 10% SDS, (iv) 2.5 ml DW (v) 1.5 ml β-mercaptoethanol and (vi) 80 mg bromphenol blue.

**6 Coomassie blue stain:** Dissolved 200 mg Coomassie blue R-250 in 100 ml of a solution containing 25:10:65 -isopropanol, acetic acid, DW, mixed and filtered through Whatman No.1 filter paper.

**7 Potassium dichromate solution:** Dissolved 883 mg K$_2$Cr$_2$O$_7$ in 1000 ml DW containing 0.2 ml HNO$_3$.

**8 Developer:** 2.97% (w/v) Na$_2$CO$_3$ and 0.02% (v/v) HCHO in DW.

**9 Farmer's reducer:** 0.96% (w/v) Na$_2$S$_2$O$_3$ and 0.075% (w/v) K$_3$Fe(CN)$_6$ in DW.

**10 Tris-barbital buffer:** 0.015 M and 0.06 M Tris in DW, pH adjusted to 8.8 with barbituric acid.

**11 Phosphate buffered glycerol:** Mixed 6 ml glycerol with 4 ml PBS containing 6.5 mg NaN$_3$.

**12 Quenching solution:** Dissolved 5 g BSA in 250 ml 0.05 M SPB pH 7.2 containing 1.8 g NaCl.

**13 Transfer buffer:** Dissolved 15.15 g Tris and 42.75 g glycine in 4 liters of DW pH 8.3 and added 1000 ml of methanol.

**14 PBS/T:** Dissolved 18 g NaCl in 2000 ml 0.01 M SPB pH 7.2 containing 1 ml Tween 20.

**15 DAB:** 50 mg Diaminobensidine in 100 ml 0.1 M citrate phosphate buffer pH 5 and added 10 ml 30% H$_2$O$_2$. 