APPENDIX A
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REAGENTS, BUFFERS

All the chemicals used in preparation of solutions were of analytical grade. Solutions were prepared using either Milli-Q water or distilled water.

30% Acrylamide (100ml)

29g Acrylamide

1g Bis-acrylamide

60 ml water

Make up the volume to 100ml with water. Filter with Whatman filter paper grade 1 and store at 4°C.

10% APS (Ammonium persulphate) (1ml)

0.1 g APS

1 ml water

Bradford Reagent

10.0mg Coomassie Brilliant Blue G-250 (CBB G-250)

5ml 95% ethanol

10ml 85% phosphoric acid

Dissolve CBB G-250 in ethanol, add 10ml phosphoric acid. Bring to 100ml with ultra pure water and when the dye has completely dissolved, filter through Whatman No. 1 paper. Store at 4°C.
**Destaining Solution (100ml)**

30ml Methanol

10ml acetic acid

60 ml water

**DNS reagent (1000 ml)**

Na-K Tartrate 182 gm.

NaOH 10 gm.

DNS 10 gm.

Phenol 02 gm.

Na$_2$SO$_4$ 0.5 gm.

Dissolve the constituents in 800 ml of water and slowly add Na-K tartrate while stirring on the magnetic stirrer. Then add DNS slowly so that it does not coagulate. Make up the volume to 1000ml. Store in dark colour bottle at 4$^\circ$ C.
**5X Running buffer (1L)**

72 g glycine  
15 g Tris  
5 g SDS  

Make up the volume to 1 litre with distilled water

**4X Sample buffer (50ml)**

1.4 ml 1M Tris-Cl pH 6.8  
22.4 ml 10% glycerol  
6 g SDS  
10 ml  
β-mercaptoethanol  
20 mg Bromo phenol Blue  

Make up the volume to 50 ml with water

**10% SDS (Sodium dodecyl sulfate; 100 ml)**

10 g SDS  
In 100 ml water  
Store at room temperature
Staining Solution (100 ml)

0.25 g Coomassie R-250
45 ml distilled water
Add 45 ml methanol
Make up the volume to 100 ml with acetic acid

Tris 1M (pH 6.8) (200ml)

24.2g Tris
100 ml water
Adjusted the pH to 6.8 using 1N HCl
Make up the volume to 200 ml
Autoclave and store at room temperature.

Tris buffer (0.1 M, pH 7)

The buffer was prepared by mixing of 0.1 M Tris- base solution and of 0.1 M HCl while adjusting the pH 7 and the final volume was made up to 100 ml.

Tris 1.5 M (pH 8.8) (200ml)

36.3g Tris
100 ml water
Adjust the pH to 8.8 with 1N HCl
Make up the volume to 200 ml
Autoclave and store at room temperature.
LIST OF PUBLICATIONS