

JBScreen: Buffer Preparation

General Notes:

- Chemicals used are of **MicroSelect grade for Molecular Biology**.
- **Buffers are prepared as 1 M stock solutions.** The pH is adjusted to the value indicated in the specification of the particular condition with HCl (Imidazole, Tris), NaOH (Bicine, CHES, HEPES, MES), Citric Acid (Citrate) or Acetic Acid (Acetate) (23°C; Fisher pH electrode). **pH values indicated are those of the buffer used, not those of the JBScreen condition!**
- Percentages given are **w/v or v/v values** (as indicated in the data sheets).
- The final volume is adjusted with >18 MOhm water.
- Solutions are filtered (0.2 µm) and filled in ampoules / tubes under sterile conditions.

Examples:

- **JBScreen 1 / D6 (30% (w/v) PEG 3000, 0.1 M Tris HCl pH 8.5, 0.2 M Lithium Sulfate):**
3000 g of PEG 3000, 1000 ml of 1 M Tris HCl pH 8.5 and 2.0 mol = 255.8 g of Lithium Sulfate Monohydrate were dissolved and the volume was adjusted to 10 Liters using >18MOhm water.
- **JBScreen 8 / A1 (50% (w/v) MPD, 15% (w/v) Ethanol, 0.01 M Sodium Acetate):**
5000 g of MPD, 1500 g of ethanol and 0.1 mol = 8.204 g of anhydrous Sodium Acetate were dissolved and the volume was adjusted to 10 Liters using >18MOhm water.
- **JBScreen Cryo 1 / C 6 (20 % (v/v) Glycerol, 20 % (w/v) PEG 4000, 10 % (v/v) 2-Propanol, 50 mM Sodium Acetate pH 4.6, 100 mM Sodium Chloride):**
2000 ml of Glycerol, 2000 g of PEG 4000, 1000 ml of 2-Propanol, 500 ml of 1 M Sodium Acetate pH 4.6 and 1.0 mol = 58.442 g of Sodium Chloride were dissolved and the volume was adjusted to 10 Liters using >18MOhm water.

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