

Polybrene stock solution preparation

(8 mg/ml in mQ; sterile filtered)

Notes. Polybrene is highly hygroscopic. Store in desiccator, or otherwise protected from moisture (wrapped in parafilm, in plastic bag)

Before opening the bottle, let it temper to room temperature, this will reduce moisture precipitation.

Polybrene should be white /off white powder, that does not stick to the spoon. If it does, it has taken moisture and cannot be used. In worst case, it can also be completely solid.

1. Weigh approx. 350 mg polybrene into falcon tube using analytical scales. Write down the reading.
2. Dissolve in ~40 ml MQ-water to make 8 mg/ml solution, adjust to final volume of 50 ml.
3. Sterile filter using 50 ml syringe and 0,22 um PES filter (Ø 30 mm). Work in laminar hood.
4. Aliquot 1 ml filtered solution to Eppendorf tubes.
5. Store at +4°C or -20°C, avoid repeated freeze and thaw cycle. Polybrene solution is stable for 2 months at +4°C.

Example

0,3505 g polybrene

$350,5 \text{ mg} / 8 \text{ mg/ml} = 43,8 \text{ ml}$

Add approx. 43,8 ml MQ-water