

Technical table for *Mentha*

Method 1: Vitrification without Cold Acclimation

| | Maintenance | Pretreatment | Loading | Dehydration | Rewarming | Recovery |
|--------------------------|---------------------------------------|---|-------------------------------|------------------------|---|--|
| Photoperiod | 16 h light/8 h dark | 16 h light/8 h dark | | | | 16 h light/8 h dark |
| Light Intensity | 55 $\mu\text{M m}^{-2} \text{s}^{-2}$ | 55 $\mu\text{M m}^{-2} \text{s}^{-2}$ | | | | Step 1: dark Step 2: 27 $\mu\text{M m}^{-2} \text{s}^{-2}$ Step 3: 55 $\mu\text{M m}^{-2} \text{s}^{-2}$ |
| Temperature | 25 \pm 3°C | 25 \pm 3°C | 21°C | 21°C | Step 1: 40 C water bath Step 2: 21°C | 25 \pm 3°C |
| Transfer interval | 4-12 weeks | Step 1: 24 hours Step 2: 24 hours | 2 hours | 20-30 minutes | Step 1: 3-5 seconds Step 2: 20 minutes | Step 1: 48 hours Step 2: 72 hours Step 3: 6 weeks |
| Vessel used | Magenta® GA7* | Petri dish | Petri dish | Petri dish/cryovial | Petri dish | Petri dish |
| Medium used | MS growth | Step 1: MS+0.06 M sucrose Step 2: MS+0.3 M sucrose | MS+2 M glycerol+0.4 M sucrose | 0.4 M sucrose +MS PVS2 | 1.2 M sucrose | Steps 1-3: BA+IBA mint recovery |