2. Tomato cultivars: The transformation procedure described here was optimized for *L. esculentum* Mill. cv. Craigella and tested for a variety of mutants in the Craigella background. Seeds of this tomato variety can be obtained from Horticulture International, Wellesbourne, UK. Another tomato cultivar, which was frequently used for the generation of transgenic plants, is *L. esculentum* Mill. cv. Moneymaker. This tomato variety is very popular and can be obtained from many local seed companies.
3. 5X Min A salts: Dissolve 52.5 g K_2HPO_4, 22.5 g KH_2PO_4, 5.0 g $(NH_4)_2SO_4$, and 2.5 g sodium citrate x $2H_2O$ in 1 L ddH_2O, and autoclave.
4. Min A medium: Mix 10 mL 5 × Min A salts and 40 mL ddH_2O. Autoclave and then add 50 µL 20% $MgSO_4$ solution (filter-sterilized) and 500 µL 20% glucose solution (filter-sterilized).
5. Rifampicin stock solution: Dissolve 50 mg of Rifampicin in 1 mL DMSO.
6. Kanamycin stock solution: Dissolve 25 mg of kanamycin in 1 mL ddH_2O and filter-sterilize the solution (*see* **Note 1**).
7. Hygromycin stock solution: Dissolve 30 mg of hygromycin B in 1 mL ddH_2O and filter-sterilize the solution.
8. Acetosyringone stock solution: 10 m*M* acetosyringone (3,5-dimethoxy-4-hydroxyacetophenone) in ethanol.
9. Zeatin riboside stock solution: Dissolve 10 mg of zeatin riboside in 10 mL ddH_2O and filter-sterilize the solution.
10. Carbenicillin stock solution: Dissolve 1 g of carbenicillin in 4 mL of ddH_2O and filter-sterilize the solution.
11. 100 × B5 vitamins: Dissolve 10 mg of nicotinic acid, 100 mg of thiamine hyddrochloride, 10 mg of pyridoxine hydrochloride, and 1 g of myo-insitol in 100 mL of ddH_2O, filter-sterilize, and freeze at –20°C in aliquots.
12. MSO medium: Dissolve 4.6 g of MS salts and 30 g of sucrose in 1 L ddH_2O, adjust the pH to 5.4 with KOH, and autoclave, then add 10 mL of the 100X B5 vitamin stock solution.
13. MSOZR medium: Prepare MSO medium and add 0.5 mL acetosyringone stock solution and 2 mL zeatin riboside stock solution. For the preparation of solid medium, add 6 g of agar per 1 L medium before autoclaving.
14. Agrobacterium induction medium. Mix the following:
    a. 5 mL 2X MS salt solution (9.2 g in 1 L ddH_2O, pH 5.4).
    b. 1.25 mL Sodium phosphate buffer (100 m*M*, pH 5.4).
    c. 5 µL Acetosyringone stock solution (10 m*M*).
    d. 20 µL Rifampicin stock solution (50 mg/mL).
    e. 20 µL Kanamycin stock solution (25 mg/mL).

    Then add ddH_2O to a final volume of 10 mL.
15. Selective shoot regeneration medium: Dissolve 4.6 g of MS salts and 30 g of sucrose in 1 L of ddH_2O, add 6 g of agar, adjust the pH to 5.7 with KOH, and autoclave. Cool the medium down to 50°C in a water bath and add 10 mL of 100X B5 vitamin stock solution, 2 mL of zeatin riboside stock solution (1 mg/mL), 4 mL of kanamycin stock solution (25 mg/mL), and 2 mL of carbenicillin stock