

Table S1 Components of BG11 medium

| Components                           | concentration (g/L) |
|--------------------------------------|---------------------|
| NaNO <sub>3</sub>                    | 1.5                 |
| MgSO <sub>4</sub> ·7H <sub>2</sub> O | 0.075               |
| Citric acid                          | 0.006               |
| EDTANa <sub>2</sub>                  | 0.001               |
| A5 solution                          | 1ml                 |
| K <sub>2</sub> HPO <sub>4</sub>      | 0.04                |
| CaCl <sub>2</sub> ·2H <sub>2</sub> O | 0.036               |
| Ferric ammonium citrate              | 0.006               |
| Na <sub>2</sub> CO <sub>3</sub>      | 0.02                |

A5 solution

| Components  | concentration (g/L) |
|---|---------------------|
| H <sub>3</sub> BO <sub>3</sub>                        | 2.86                |
| ZnSO <sub>4</sub> ·7H <sub>2</sub> O                  | 0.22                |
| CuSO <sub>4</sub> ·5H <sub>2</sub> O                  | 0.079               |
| MnCl <sub>2</sub> ·4H <sub>2</sub> O                  | 1.86                |
| Na <sub>2</sub> MoO <sub>4</sub> ·2H <sub>2</sub> O   | 0.039               |
| Co (NO <sub>3</sub> ) <sub>2</sub> ·6H <sub>2</sub> O | 0.05                |

Table S2 Components of R2A liquid medium

| Components                  | concentration (g/L) |
|-----------------------------|---------------------|
| Proteose Peptone            | 0.25                |
| Starch                      | 0.5                 |
| Glucose                     | 0.5                 |
| Yeast Extract               | 0.5                 |
| Casein Hydrolysate          | 0.5                 |
| Dipotassium Phosphate       | 0.3                 |
| Sodium Pyruvate             | 0.3                 |
| Magnesium Sulfate Anhydrous | 0.1                 |
| Bacteriological Agar        | 15.00               |
| pH                          | 7.2±0.2             |