

1. Library creation and selection

P. putida GPo12 (pGEc47ΔB) pCom10_alkB
adapted clone

2. Separation and identification

Palk1
adapted host

pCom10
no improvement

alkB-BMO1
encodes evolved variant

3. Strain assembly

Palk1 pCom10_alkB-BMO1

4. Library creation and selection

Palk1 pCom10_alkB-BMO1
adapted clone

5. Separation and identification

Palk1
no improvement

pCom10
no improvement

alkB-BMO2
encodes evolved variant

6. Strain assembly

Palk1 pCom10_alkB-BMO2
adapted strain utilized for growth tests