1. Library creation and selection

\[ P. \ putida \ \text{GPo12 (pGEc47ΔB) pCom10}_\text{alkB} \]
\[ \text{adapted clone} \]

2. Separation and identification

\[ \text{Palk1} \]
\[ \text{adapted host} \]
\[ \text{pCom10} \]
\[ \text{no improvement} \]
\[ \text{alkB-BMO1} \]
\[ \text{encodes evolved variant} \]

3. Strain assembly

\[ \text{Palk1 pCom10}_\text{alkB-BMO1} \]

4. Library creation and selection

\[ \text{Palk1 pCom10}_\text{alkB-BMO1} \]
\[ \text{adapted clone} \]

5. Separation and identification

\[ \text{Palk1} \]
\[ \text{no improvement} \]
\[ \text{pCom10} \]
\[ \text{no improvement} \]
\[ \text{alkB-BMO2} \]
\[ \text{encodes evolved variant} \]

6. Strain assembly

\[ \text{Palk1 pCom10}_\text{alkB-BMO2} \]
\[ \text{adapted strain utilized for growth tests} \]