

Supplementary Data

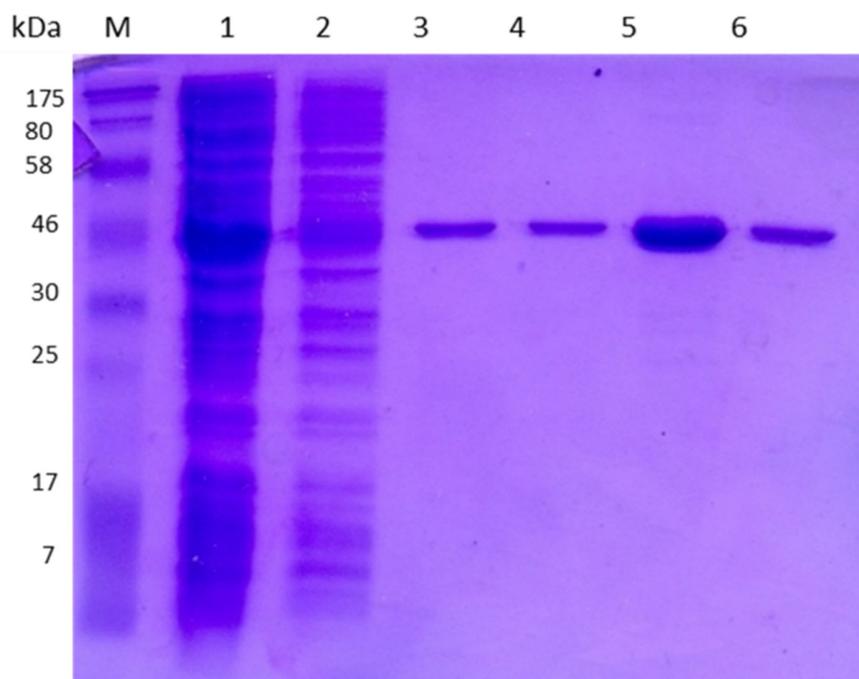


Figure S1. SDS-PAGE protein analysis. Purification of overexpressed GDO from *P. phenanthrenivorans* Sphe3. Lane M, protein molecular mass marker in kDa; lane 1, cell-free crude extract from *E. coli* BL21/pET29c::gtdA; lane 2, column chromatography flow-through; lanes 3,4,5 and 6, purified GDO protein (41 kDa) fractions eluted with varying concentration of imidazole.

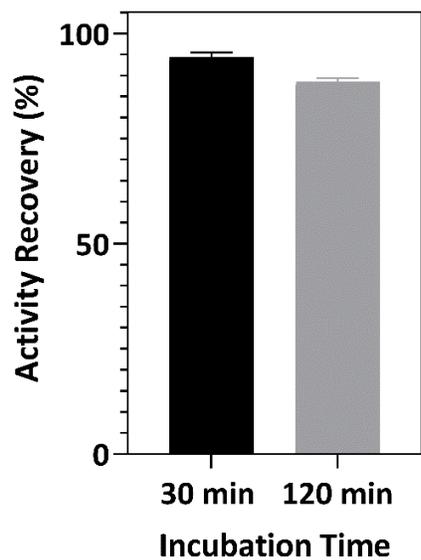


Figure S2. Immobilization parameters optimization in relation to incubation time.

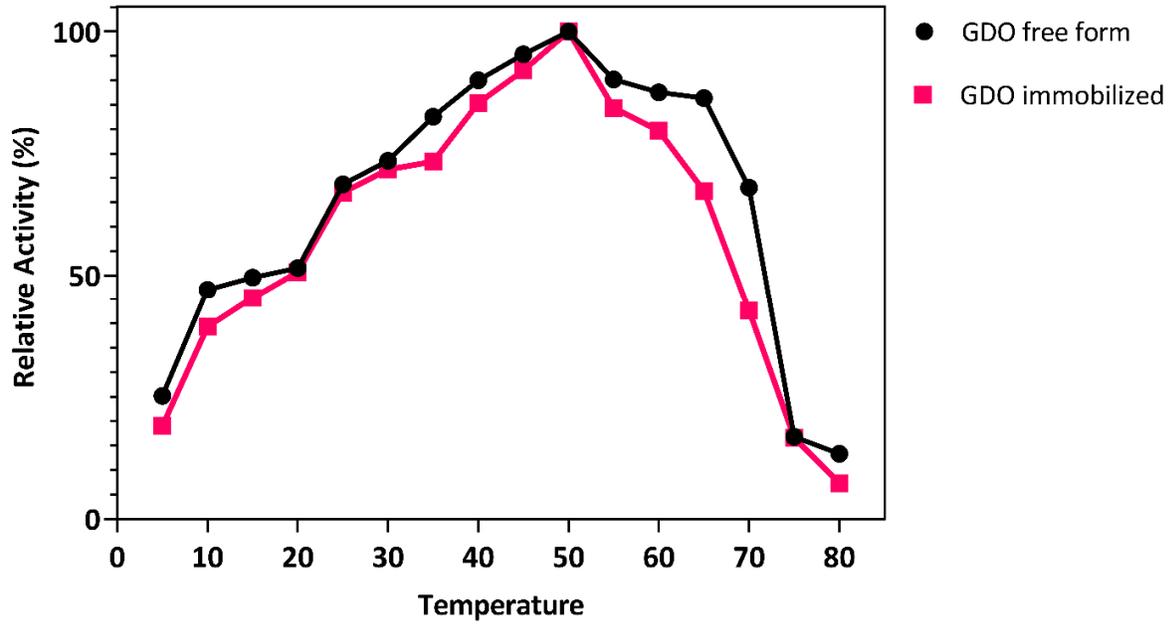


Figure S3. Effect of temperature on the activity of GDO. Free form GDO (black) and GDO after immobilization (coloured). The activities at the optimum temperature were set to 100% for each case.