

# Shewanella oneidensis MR-1

Bacteria&gt;Proteobacteria&gt;Gammaproteobacteria&gt; Alteromonadales&gt;Shewanellaceae

Technique	Status	Details
Culture on solid media	√	<b>Incubate at 30°C, colonies may take &gt;16 hrs to reach sufficient size</b>
Culture in liquid media	√	<b>Incubate at 30°C</b>
Chemical competence	×	Calcium/magnesium chloride preparations fail
Electroporation	√	Protocol available on Harvard iGEM 08 notebook
Transforming unmethylated DNA	√	Transformation of plasmids from PCR-based site directed mutagenesis works
Miniprep	√-	Minipreps (Qiagen kit) are not clean: sufficient for sequencing but subsequent cloning steps not recommended
Colony PCR	√	Protocols for <i>E. coli</i> are sufficient
Genomic knockout	√	See <a href="https://doi.org/10.1128/AEM.01087-07">doi:10.1128/AEM.01087-07</a>

Origin of replication	Status	Details
p15A	√	pSB3K3 works
CloDF13	√	<a href="#">Available</a>
ColE1	?	We found that it works, but this conflicts with previous findings by Myers and Myers
pSC101	×	pSB4C5 fails
pSC101*	√	<a href="#">Found on pZ vector system</a>
R6K	×	Not tested with introduced <i>pir</i>

Selection markers	Status	Details
Ampicillin	×	Cells are resistant
Chloramphenicol	√	
Gentamicin	√	
Kanamycin	√	
Spectomycin	√	

BioBrick	Type	Status	Details
J23113, J23151, R0010	Promoter	√	
B0032, B0034	RBS	√	
J04031	Reporter	√	GFP (LVA efficacy unknown)