

## Cloning and characterization of an oxiranedicarboxylate hydrolase from *Labrys* sp. WH-1<sup>\*#</sup>

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Table S1 Primers used in this study

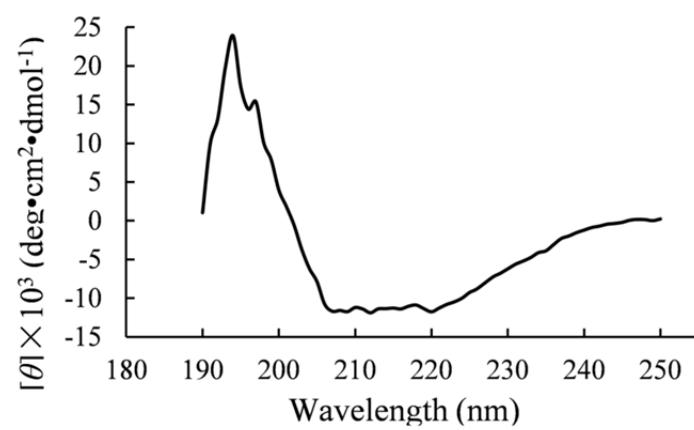
Primers	Sequence*
P1	5'-ATGAARXTNPKNNGGNXTNPKN-3'
P2	5'-XXANGCNARNCZRTCNGCNAR-3'
P3	5'-TGCCATGGATATGAAGCTGTCGGGTCTGTCG-3'
P4	5'-CGGGATCCTCAGCCCCGAGCCTGT-3'

\*Y represents A or C, R represents A or G, X represents T or C, P represents A or T, K represents G or C, Z represents G or T, N represents A, C, G, or T

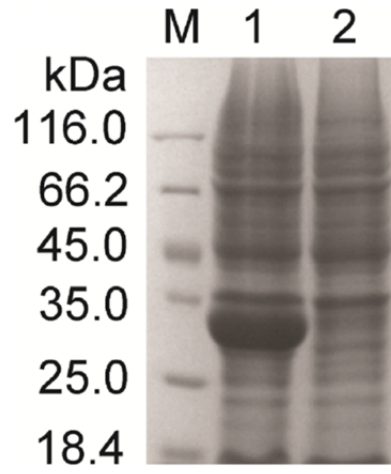
**Table S2 Amino acid composition of ORCHs from *Labrys* sp. WH-1 and other reported species**

Amino acid	Composition (g per 100 g of protein) <sup>a</sup>		
	<i>Labrys</i>	<i>Rhodococcus</i>	<i>Klebsiella</i>
Asp	8.02	8.59	6.88
Asn	1.51	2.84	3.83
Ser	3.18	5.88	7.23
Glu	5.14	7.80	7.80
Gln	2.13	2.84	4.10
Gly	3.79	3.85	3.60
His	1.82	1.46	1.37
Arg	14.51	11.10	8.30
Thr	4.02	4.67	5.04
Ala	10.37	6.32	8.02
Pro	4.19	2.76	3.55
Cys	0.68	1.10	0.34
Tyr	4.87	4.64	4.88
Val	7.23	5.99	5.27
Met	3.05	0.93	2.18
Lys	2.98	2.73	6.38
Ile	3.00	3.22	4.13
Leu	10.89	13.27	10.14
Phe	4.88	4.71	7.33
Trp	3.70	3.97	3.71
Basic amino acid	19.30	15.30	16.05
Hydrophobic amino acid	40.08	37.48	38.60
Polar neutral amino acid	16.40	23.23	23.96

<sup>a</sup> The amino acid composition of the ORCHs from *Labrys* (GenBank accession no. MK994516), *Rhodococcus* (GenBank accession no. DQ471957) and *Klebsiella* (GenBank accession no. KF977193) were derived from their reported gene sequences.



**Fig. S1** CD spectra of the ORCH from *Labrys* sp. WH-1



**Fig. S2** Expression of ORCH from *Labrys* sp. WH-1 in recombinant bacteria by SDS-PAGE analysis  
M, protein marker; 1, total protein of recombinant bacteria induced by IPTG; 2, total protein of recombinant bacteria without induction