

Supplemental Table S1. Edo-containing contig information obtained per each of the positive clones. The lengths of the contigs are as submitted to database. Note that after assembly in some cases full length fosmid sequences were obtained. However, in other cases the genes encoding full-length Edo proteins were detected in short contigs.

Clone	Length (bp)	Clone	Length (bp)
UPO33	13791	UPO60	9934
UPO34	913	UPO61	28786
UPO35	31941	UPO64	38849
UPO36	35754	UPO65	876
UPO37	23169	UPO66	876
UPO38	29023	UPO67	22358 + 7552
UPO40	913	UPO68	27688
UPO41	24654	UPO69	903
UPO42	39546	UPO71	35472
UPO43	29470	UPO72	3101
UPO44	903	UPO74	6907
UPO45	25634	UPO75	24720
UPO46	31338	UPO76	32228
UPO47	30346	UPO77	903
UPO48	870	UPO78	25399
UPO49	4502	UPO79	903
UPO50	29235	UPO80	903
UPO51	2545	UPO85	903
UPO52	3101	UPO86	903
UPO53	34769	UPO87	27688
UPO54	21209	UPO88	876
UPO55	3101	UPO89	13989
UPO57	22424	UPO90	8035
UPO58	3101	UPO91	4555

Supplemental Table 2. Metagenomic *edo* genes and clone(s) harbouring them.

gene	clone	gene	clone
<i>edoA</i> ₁	UPO36	<i>edoQ</i> ₁	UPO37 UPO60 UPO89
<i>edoA</i> ₂	UPO47	<i>edoQ</i> ₂ *	UPO74
<i>edoA</i> ₃	UPO43	<i>edoQ</i> ₃ *	UPO65
<i>edoB</i> ₁	UPO68 UPO87	<i>edoQ</i> ₄ *	UPO66
<i>edoB</i> ₂	UPO67	<i>edoQ</i> ₅ *	UPO88
<i>edoB</i> ₃	UPO51	<i>edoR</i>	UPO61
<i>edoC</i> ₁	UPO49 UPO50	<i>edoS</i> ₁	UPO69 UPO79 UPO80
<i>edoC</i> ₂	UPO35	<i>edoS</i> ₂	UPO44 UPO85
<i>edoC</i> ₃	UPO46	<i>edoS</i> ₃	UPO91
<i>edoC</i> ₄	UPO38	<i>edoS</i> ₄	UPO77
<i>edoC</i> ₅	UPO33	<i>edoS</i> ₅	UPO86
<i>edoD</i> ₁	UPO52 UPO55 UPO58 UPO72	<i>edoT</i>	UPO76
<i>edoD</i> ₂	UPO78	<i>edoU</i>	UPO53
<i>edoF</i>	UPO71	<i>edoV</i>	UPO42
<i>edoG</i>	UPO57	<i>edoW</i>	UPO34 UPO40
<i>edoH</i>	UPO41	<i>edoX</i> ₁	UPO67
<i>edoO</i> ₁	UPO90	<i>edoX</i> ₂	UPO51
<i>edoO</i> ₂	UPO54	<i>edoY</i> ₁	UPO64
<i>edoO</i> ₃	UPO75	<i>edoY</i> ₂	UPO64
<i>edoO</i> ₄	UPO48	<i>edoY</i> ₃	UPO45
<i>edoP</i>	UPO45		

* These *edo* genes are very similar and encode the same enzyme denoted EdoQ₂.