

**Zedelius et al.**

**Table S4.** Genome-based prediction of alkane monooxygenases (alkane hydroxylases) in strain HdN1.

Predicted gene (product) of strain HdN1					BLASTP hit used for annotation			
Identifier	Start (bp)	Amino acids	Predicted function	InterPro <sup>a</sup>	Gene	Organism <sup>b</sup>	E-value	Acc. no.
<b><i>Cyt P450 monooxygenase</i> (accessory proteins<sup>c</sup> in grey)</b>								
HDN1F_17550	2,213,848	106	Ferredoxin	IPR001041		Alcbo	2e-44	Q5ca10
HDN1F_17560	2,214,183	471	Cytochrom P450 alkane hydroxylase	IPR001128	<i>ahpG2</i>	Alcbo	0	Q5K133
HDN1F_17570	2,215,803	410	Ferredoxin reductase	IPR001327		Alcbo	0	Q5ca08
<b><i>Alkane-1-monooxygenase</i> (di-iron enzyme)</b>								
HDN1F_04180	517,699	314	Transcriptional regulator, AlkR	IPR000005	<i>alkR</i>	Acica	4e-71	Q9xdp8
HDN1F_04190	517,997	423	Alkane 1-monooxygenase, AlkM (di-iron)	IPR012145		Aciba	1e-138	ZP_05827357
<b><i>Alkane-1-monooxygenase</i> (flavin enzyme)</b>								
HDN1F_14540	1,814,074	505	Alkane 1-monooxygenase (flavin)	IPR000960		Alcbo	9e-167	YP_692002
HDN1F_17470	2,204,606	500	Alkane 1-monooxygenase (flavin)	IPR000960		Alcbo	0	YP_692002
HDN1F_17580	2,218,527	512	Alkane 1-monooxygenase (flavin)	IPR000960		Alcbo	0	YP_691914
HDN1F_30030	3,708,484	495	Alkane 1-monooxygenase (flavin)	IPR000960		Alcbo	2e-178	YP_692002
HDN1F_36680	4,423,219	511	Alkane 1-monooxygenase (flavin)	IPR000960		Alcbo	3e-159	YP_691914

<sup>a</sup> IPR001041: domain, ferredoxin; IPR001128: family, cytochrome P450; IPR001327: domain, FAD-dependent pyridine nucleotide-disulfide oxidoreductase; IPR000005: domain, helix-turn-helix, AraC type; IPR012145: family, alkane 1-monooxygenase; IPR000960: family, flavin-containing monooxygenase FMO.

<sup>b</sup> Abbreviations for organisms: Aciba, *Acinetobacter baumannii*; Acica, *Acinetobacter calcoaceticus*; Alcbo, *Alcanivorax borkumensis*.

<sup>c</sup> Genes for accessory proteins in direct proximity to the predicted oxygenase-related genes.