

**Table S2. *In silico* analysis of adenylation domains in xantholysin synthetases.** Predicted substrate specificity of the A domains in the xantholysin NRPSs.

<b>NRPSpredictor2</b>						
<b>Protein</b>	<b>Domain</b>	<b>Signature</b>	<b>Motif</b>	<b>AA (score)</b>	<b>Phylotree<sup>a</sup></b>	
XtlA	A1	LWHAFDAMAWEPFLLVG GDINNYGPTTEATVVASA	DAWFLGNVVK	Leu (100%)	Leu	
	A2	LWGAFDGSVWEWKFFCG GGHNVYGPTTEATVDSTA	DGWKFGVVDK	Asp (70%)	Glu	
XtlB	A3	LWATFDASVWEWQFVCG GGHNVYGPTTETTVDCSTV	DAWQVGVDK	Gln (70%)	Gln	
	A4	LNNSFDASTLEAWLMVG GDLNGYGPTTEATTFSTT	DALWGGTFK	Val (80%)	Val	
	A5	LWHAFDAMAWEPFLLVG GDVNNYGPTTETTVVATS	DAWFLGNVVK	Leu (100%)	Leu/Ile	
	A6	LWSTFDASVWEWQFVCG GGHNVYGPTTETTVDCSV	DAWQVGVDK	Gln (70%)	Gln	
	A7	RWMTFDVSVWEWHFLCS GEHNLYGPTTEAAVDVSA	DVWHLVVDK	Ser (80%)	Ser	
	A8	LNNSFDASTLEAWLMVG GDLNGYGPTTEATTFSTT	DALWGGTFK	Val (80%)	Val	
	A9	LWHAFDAMAWEPFLLVG GDVNNYGPTTETTVVATS	DAWFLGNVVK	Leu (100%)	Leu/Ile	
	A10	LWSTFDASVWEWQFVCG GGHNVYGPTTETTVDCSV	DAWQVGVDK	Gln (70%)	Gln	
	XtlC	A11	LWHAFDAMAWEPFLLIG GDVNNYGPTTETTVVASS	DAWFLGNVVK	Leu (100%)	Leu
		A12	LWHAFDAMAWEPFLLIG GDVNNYGPTTEATVVATS	DAWFLGNVVK	Leu (100%)	Leu
A13		LWSTFDASVWEWQFVCG GGHNVYGPTTEATVDCSV	DAWQVGVDK	Gln (70%)	Gln	
A14		LNNSFDAATLDGFVLCG GEVHCYGPTEATTFATA	DALFLGCTFK	Leu (70%)	Ile/Val/Leu	

<sup>a</sup> Deduced from A domain clustering in Fig. 3