Electronic Supplementary Information

Isolation of doxorubicin from bacterial culture using immobilised metal ion affinity chromatography

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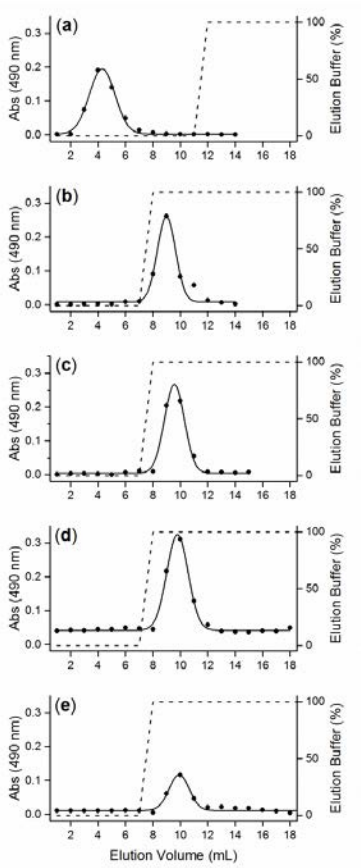

Fig. S1 Behaviour of a solution of a DXR standard (0.94 nmol) on a bed of 1 mL Ni(II)-charged IDA resin at: (**a**) pH 6.0, (**b**) pH 7.0, (**c**) pH 7.5, (**d**) pH 8.0, or (**e**) pH 9.0.

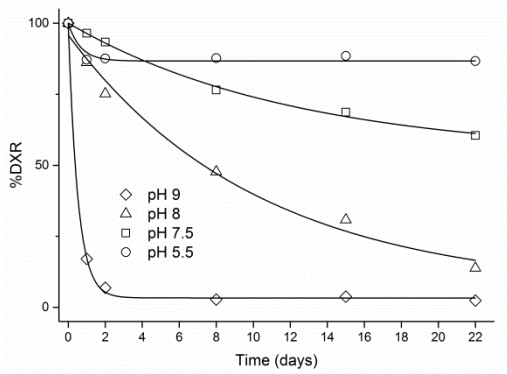

Fig. S2 Stability of DXR as a function of pH as determined from LC-MS measurements from solutions aged over 22 days.

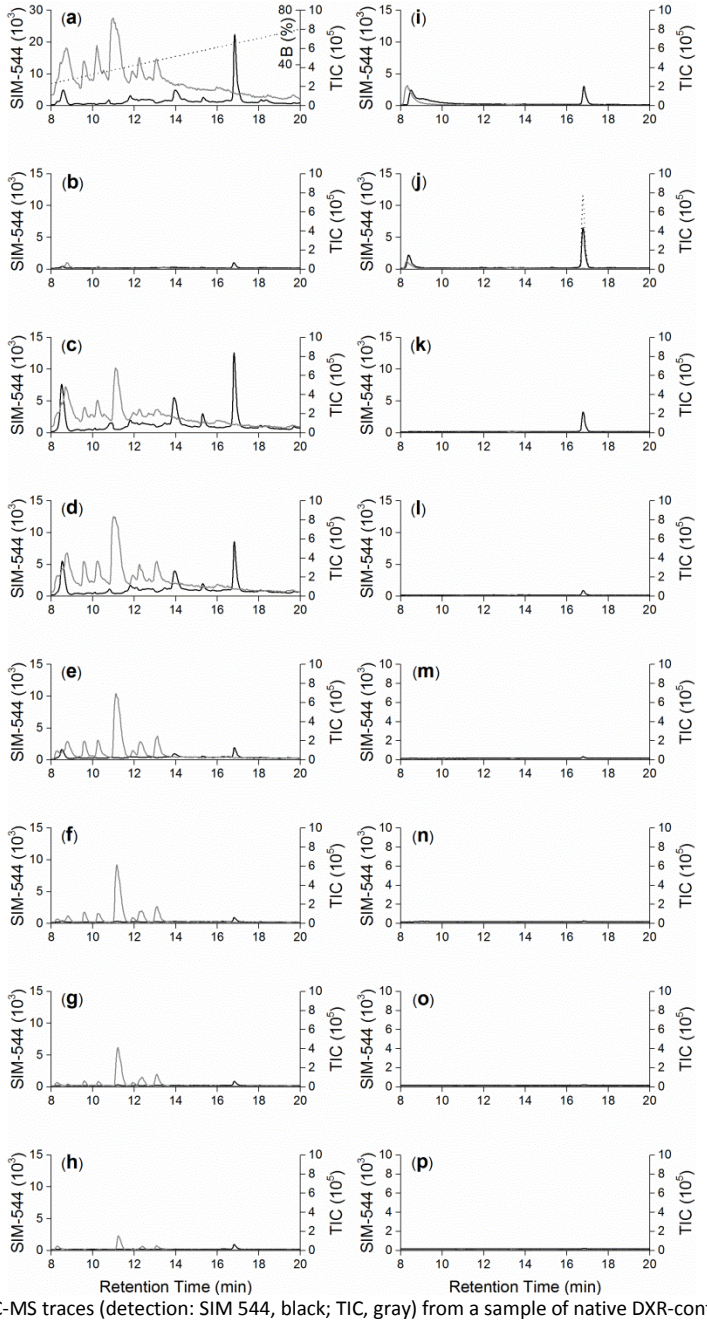

Fig. S3 LC-MS traces (detection: SIM 544, black; TIC, gray) from a sample of native DXR-containing *S. peucetius* var. *caesius* culture (**a**), and the fractions collected during the binding (**b**-**h**) or elution (**i**-**p**) of the sample as processed on a Ni(II)-charged IDA IMAC resin. The gradient in (**a**) was the same in (**b**-**p**). The sample in (**j**) was reacquired upon the addition of authentic DXR (dotted).

Table S1. Bacteriological medium components for culturing *Streptomyces peucetius* var. *caesius* (as from: M. L. Dekleva, et. al., *Can. J. Microbiol.*, 1985, **31**, 287-294).

N°	Chemical	C[a]	[Final] /L	N°	Chemical	C[a]	[Final] /L	Structure
1	glucose	B	55.6 mM	**12**	Folic acid	V	4.5 nM	
2	asparagine	B	6.7 mM	**13**	Lipoic acid	V	9.7 nM	
3	K_2HPO_4	B	5.8 mM	**14**	Vitamin B12	V	73.8 pM	
4	$MgSO_4{\cdot}7H_2O$	B	1 mM	**15**	$CuCl_2{\cdot}2H_2O$	M	0.23 µM	
5	pyridoxine HCl	V	48.6 nM	**16**	$MnCl_2{\cdot}2H_2O$	M	0.25 µM	
6	thiamine HCl	V	16.6 nM	**17**	$Na_2B_4O_7{\cdot}10H_2O$	M	0.10 µM	
7	*p*-aminobenzoic acid	V	36.5 nM	**18**	$FeCl_3{\cdot}6H_2O$	M	14.8 µM	
8	nicotinic acid	V	40.6 nM	**19**	$ZnCl_2$	M	5.9 µM	
9	D-pantothenate	V	21.0 nM	**20**	$(NH_4)_6Mo_7O_{24}{\cdot}4H_2O$	M	0.16 µM	
10	riboflavin	V	13.3 nM	**21**	$NiCl_2$	M	0.77 µM	
11	biotin	V	8.2 nM					

[a] Component of base medium (B), vitamin solution (V) or trace metal solution (M).