

## Supplementary Material

### Antibiotic and metal resistance of cultivable bacteria in the Antarctic sea urchin

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Table S1. Phylogenetic close sequences of amplified 16S rRNA isolated strain from coelomic fluid of the Antarctic sea urchin *Sterechinus neumayeri*. ACT = Actynomicetes media, MA = marine agar and R2A media.

Strain (GenBank accession number)	Growth media	Closest match (obtained from BLAST search)	Plylogenetic group	Sequence identity (%)	Length (pb)
EA7 (KP849515)	ACT	<i>Agreia</i> sp. (HM629407)	Actinomycetales	100	640
A11 (KP849516)	ACT	<i>Microbacterium</i> sp. (EU052742)	Actinomycetales	99	666
EA1 (KP849517)	ACT	<i>Microbacterium</i> sp. (EU052742)	Actinomycetales	99	631
E6FA12 (KP849518)	ACT	<i>Flavobacterium</i> sp. (EU580453)	Flavobacteria	99	651
B7 (KP849519)	ACT	<i>Flavobacterium</i> sp. (EU580453)	Flavobacteria	99	760
E6F6 (KP849520)	ACT	<i>Flavobacterium</i> sp. (AF493695)	Flavobacteria	98	700
EA2 (KP849521)	ACT	<i>Flavobacterium frigidarium</i> (HM443880)	Flavobacteria	99	611
E6FA11 (KP849522)	ACT	<i>Flavobacterium</i> sp.(EU580453)	Flavobacteria	99	765
EA3 (KP849523)	ACT	<i>Flavobacterium</i> sp. (EU580453)	Flavobacteria	99	750
E6FA16 (KP849524)	ACT	<i>Flavobacterium frigidarium</i> (HM443880)	Flavobacteria	87	628
6FA4 (KP849525)	ACT	<i>Flavobacterium</i> sp. (AY586526)	Flavobacteria	83	409
E6FA6 (KP849526)	ACT	<i>Flavobacterium frigidarium</i> (AY771722)	Flavobacteria	99	651
B5 (KP849527)	ACT	<i>Pseudomonas fluorescens</i> (HQ658766)	Gammaproteobacteria	99	690
E6FA10 (KP849528)	ACT	<i>Pseudomonas fluorescens</i> (HQ658766)	Gammaproteobacteria	99	601
B4 (KP849529)	ACT	<i>Pseudomonas fluorescens</i> (HQ658766)	Gammaproteobacteria	100	671
E6F5 (KP849530)	ACT	<i>Pseudomonas fluorescens</i> (HQ658766)	Gammaproteobacteria	100	619
E6F3 (KP849531)	ACT	<i>Pseudomonas</i> sp. (HQ003454)	Gammaproteobacteria	99	685
E6F9 (KP849532)	ACT	<i>Pseudomonas</i> sp.(HQ003454)	Gammaproteobacteria	100	800
E6F1 (KP849533)	ACT	<i>Pseudomonas fluorescens</i> (JN030498)	Gammaproteobacteria	95	393
A9 (KP849534)	ACT	<i>Psychrobacter</i> sp. (JF273861)	Gammaproteobacteria	100	820
6FA5 (KP849535)	ACT	<i>Psychrobacter</i> sp. (EU075120)	Gammaproteobacteria	99	570

A10 (KP849536)	ACT	<i>Psychrobacter</i> sp. (JF273861)	Gammaproteobacteria	100	921
EA6 (KP849537)	ACT	<i>Psychrobacter</i> sp. (JF273861)	Gammaproteobacteria	99	760
E6FA13 (KP849538)	ACT	<i>Psychrobacter</i> sp. (HQ448946)	Gammaproteobacteria	100	800
B3 (KP849539)	ACT	<i>Psychrobacter</i> sp. (HQ448946)	Gammaproteobacteria	99	800
9AR (KP849545)	MA	<i>Pseudoalteromonas</i> sp. (HQ453988)	Gammaproteobacteria	100	660
1AR (KP849546)	MA	<i>Pseudoalteromonas arctica</i> (FR750943)	Gammaproteobacteria	99	640
32AR (KP849547)	MA	<i>Pseudoalteromonas</i> sp. (FJ594949)	Gammaproteobacteria	99	650
27AR (KP849548)	MA	<i>Pseudoalteromonas</i> sp. (DQ517881)	Gammaproteobacteria	99	700
25AR (KP849549)	MA	<i>Pseudoalteromonas</i> sp. (JF825441)	Gammaproteobacteria	100	700
10AR (KP849550)	MA	<i>Psychrobacter</i> sp. (JF706641)	Gammaproteobacteria	100	800
92AR (KP849551)	MA	<i>Shewanella</i> sp. (JF273869)	Gammaproteobacteria	100	700
18AR (KP849552)	MA	<i>Pseudoalteromonas</i> sp. (HQ882787)	Gammaproteobacteria	100	700
72AR (KP849553)	MA	<i>Shewanella</i> sp. (JF273869)	Gammaproteobacteria	100	700
E4R (KP849554)	MA	<i>Flavobacterium</i> sp. (HM443878)	Flavobacteria	99	700
E46R (KP849555)	R2A	<i>Flavobacterium</i> sp. (AF493695)	Flavobacteria	98	755
E26R (KP849556)	R2A	<i>Flavobacterium</i> sp. (AM177630)	Flavobacteria	100	700
E29R (KP849557)	R2A	<i>Flavobacterium</i> sp. (EU580453)	Flavobacteria	95	488
E152R (KP849558)	R2A	<i>Flavobacterium frigidarium</i> (AB455257)	Flavobacteria	99	700
E23R (KP849559)	R2A	<i>Pseudomonas corrugata</i> (FR877573)	Gammaproteobacteria	97	354
E2R (KP849560)	R2A	<i>Psychrobacter</i> sp. (HM629412)	Gammaproteobacteria	100	700
E34R (KP849561)	R2A	<i>Psychrobacter</i> sp. (HQ690911)	Gammaproteobacteria	100	700

Figure S1. Identification of plasmid by DNA agarose gel electrophoresis. The gel was carried out in TAE buffer during 50 min at 100 V. A 1kb DNA ladder was used.

