

## **Start-up of electromethanogenic microbial electrolysis cells with two different biomass inocula**

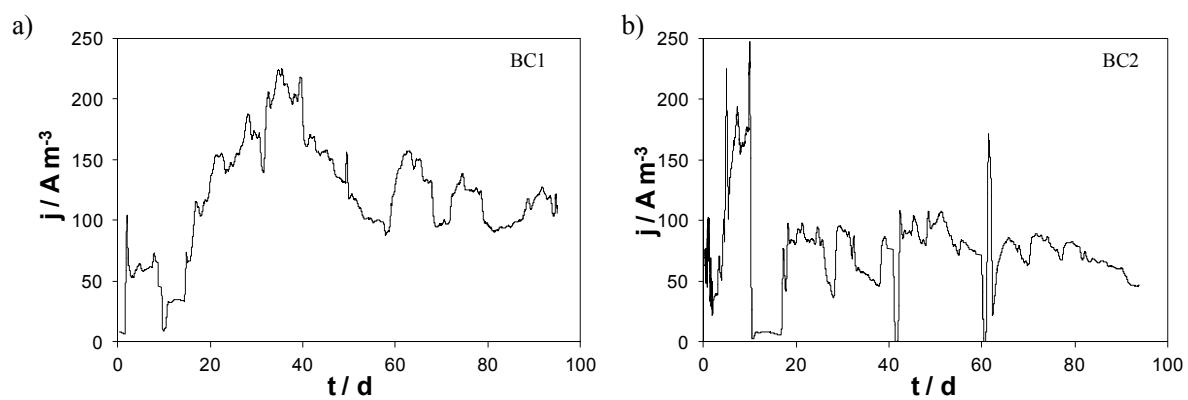
Míriam Cerrillo<sup>1</sup>, Marc Viñas<sup>1</sup>, August Bonmatí<sup>1\*</sup>.

### **Supporting information (4 pages)**

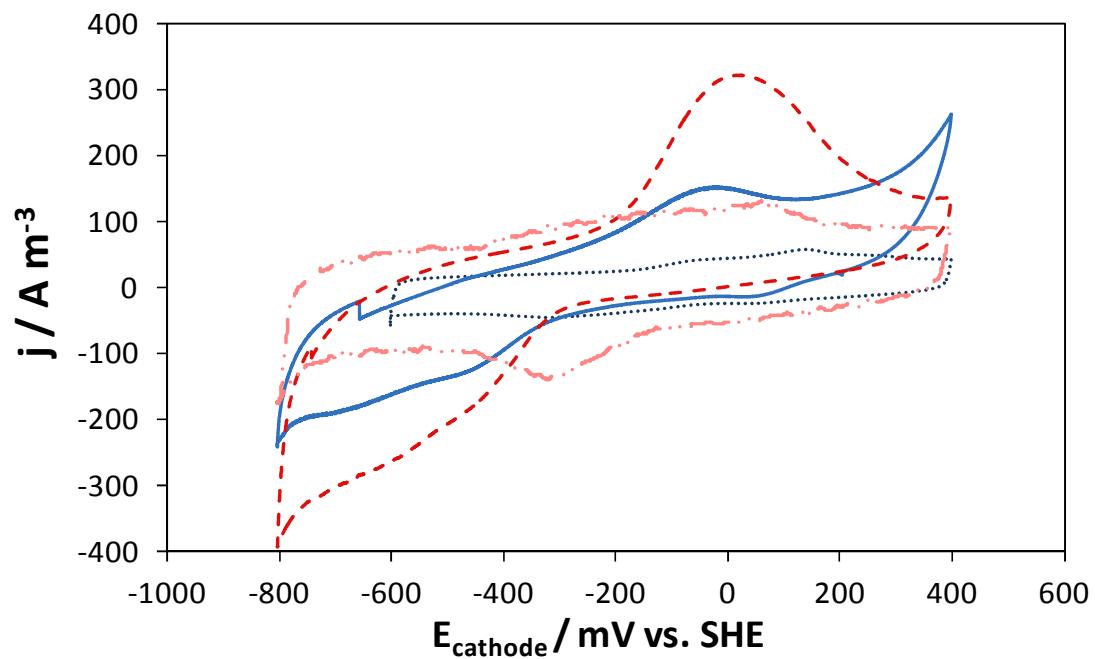
- **Table S1.** Diversity indexes
- **Figure S1.** Current density profiles
- **Figure S2.** Cyclic voltammograms
- **Figure S3.** Correspondence analysis

**Table S1.** Diversity indexes for Eubacteria and Archaeal community of the inoculums and the final biofilm of BC1 and BC2 (BC1f and BC2f, respectively) for 16S rRNA (cDNA) and 16S rDNA (DNA) massive libraries (mean±standard deviation). Data normalized to the sample with the lowest number of reads (104277 and 93126 for eubacterial and archaeal, respectively).

	Reads	Coverage	Inverted Simpson	Shannon
<b>Eubacteria</b>				
Inoculum BC1-DNA	110431	1.00±0.00	9.20±0.01	3.67±0.00
BC1f-DNA	104277	1.00±0.00	9.02±0.00	3.62±0.00
Inoculum BC2-DNA	114481	1.00±0.00	13.66±0.02	3.56±0.00
BC2f-DNA	174367	1.00±0.00	16.36±0.04	3.90±0.00
BC1f-cDNA	206865	1.00±0.00	6.73±0.02	3.51±0.00
Inoculum BC2-cDNA	243660	1.00±0.00	5.69±0.02	3.22±0.00
BC2f-cDNA	112853	1.00±0.00	9.90±0.01	3.33±0.00
<b>Archaea</b>				
Inoculum BC1-DNA	93126	1.00±0.00	13.04±0.00	3.17±0.00
BC1f-DNA	177146	1.00±0.00	2.46±0.01	1.51±0.00
Inoculum BC2-DNA	223995	1.00±0.00	3.86±0.01	2.54±0.00
BC2f-DNA	212931	1.00±0.00	2.21±0.00	1.45±0.00
BC1f-cDNA	192016	1.00±0.00	2.30±0.01	1.48±0.00
Inoculum BC2-cDNA	175828	1.00±0.00	3.97±0.01	2.34±0.00
BC2f-cDNA	230930	1.00±0.00	1.91±0.00	1.05±0.00

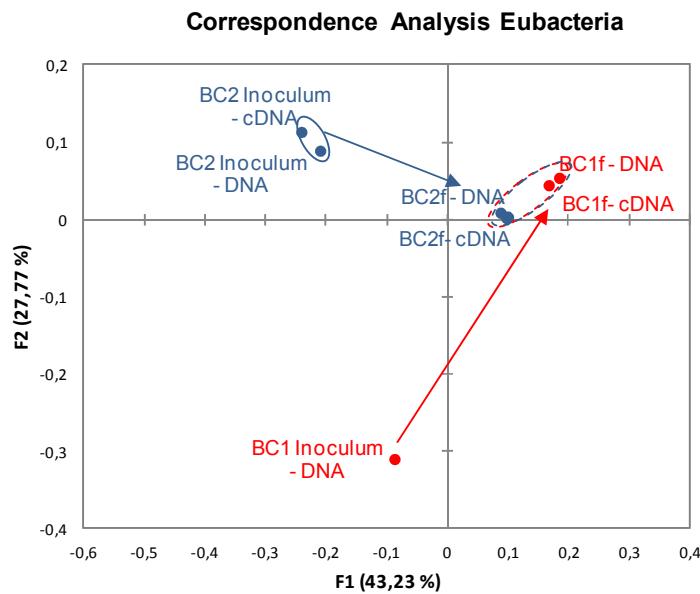


**Figure S1** Current density ( $j$ ) profiles obtained for (a) BC1 and (b) BC2.

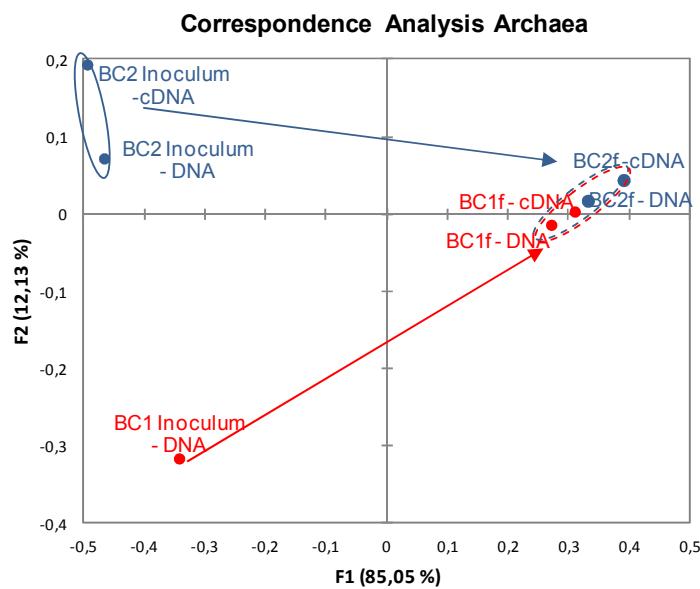


**Figure S2** Cyclic voltamograms obtained for BC1 and BC2 at the start (BC1i and BC2i) and the end (BC1f and BC2f) of the assay. BC1i (.....); BC1f (□□); BC2i (—..—); BC2f (- - -).

a)



b)



**Figure S3** Correspondence Analysis (CA) of the inoculum of BC1 and BC2 and the final sample of each cathode for 16SrDNA and 16SrRNA (cDNA) regarding (a) Eubacteria and (b) Archaea community on the basis of MiSeq-16S based profile (OTU level).