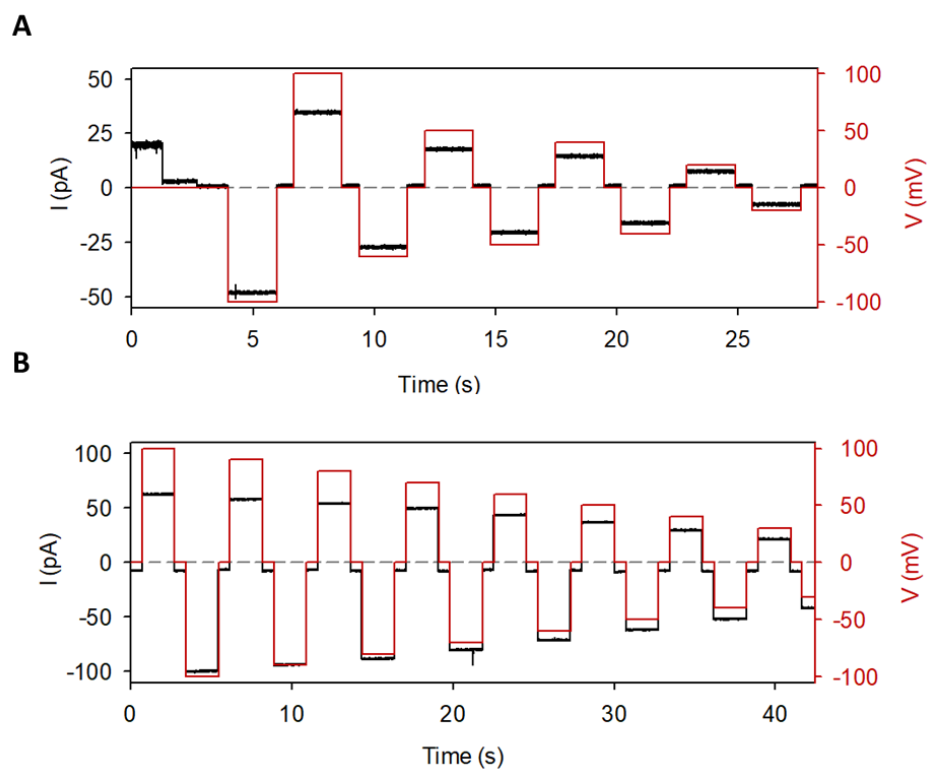


## SUPPLEMENTARY MATERIAL



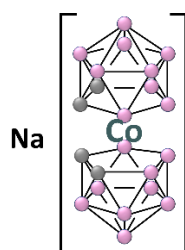
**Figure S1 – Current traces of Dyna-induced pores.** Current traces corresponding to the I-V curves shown in Figure 3.

**Table 1** – Basic physicochemical properties of DynA<sup>(a)</sup> and [*o*-COSAN]<sup>(b)</sup>.

	DynA	[ <i>o</i> -COSAN]
Molecular weight	2147.5	323.75
Charge	+4	-1

<sup>a</sup>From ref. [1]

<sup>b</sup>From ref. [2]



**Figure S2** – Schematic representation of the anionic small metallacarborane cobaltabis(dicarbollide) molecule, abbreviated as [o-COSAN]. Circles in grey represent the C–H vertices while the circles in pink correspond to B–H vertices.

- [1] L. Gallego-Villarejo, C. Wallin, S. Król, J. Enrich-Bengoa, A. Suades, M. Aguilera-Arzo, M.J. Gomara, I. Haro, S. Wärmländer, F.J. Muñoz, A. Gräslund, A. Perálvarez-Marín, Big dynorphin is a neuroprotector scaffold against amyloid  $\beta$ -peptide aggregation and cell toxicity, *Comput. Struct. Biotechnol. J.* 20 (2022) 5672–5679. <https://doi.org/10.1016/j.csbj.2022.10.014>.
- [2] I. Bennour, M.N. Ramos, M. Nuez-Martínez, J.A.M. Xavier, A.B. Buades, R. Sillanpää, F. Teixidor, D. Choquesillo-Lazarte, I. Romero, M. Martinez-Medina, C. Viñas, Water soluble organometallic small molecules as promising antibacterial agents: synthesis, physical–chemical properties and biological evaluation to tackle bacterial infections, *Dalt. Trans.* 51 (2022) 7188–7209. <https://doi.org/10.1039/D2DT01015A>.