

SUPPLEMENTARY INFORMATION FOR

The aquaporin-3 inhibiting potential of polyoxotungstates

Catarina Pimpão^{1,2,†}, Inês V. da Silva^{1,2,†}, Andreia F. Mósca^{1,2}, Jacinta O. Pinho^{1,3}, Maria Manuela Gaspar^{1,3}, Nadiia I. Gumerova⁴, Annette Rompel⁴, Manuel Aureliano^{5,*} and Graça Soveral^{1,2,*}

¹ Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, 1649-003 Lisboa, Portugal; pimpaocatarina@gmail.com; imvsilva@ff.ul.pt; andreiafbm@medicina.ulisboa.pt; jopinho@ff.ulisboa.pt; mgaspar@ff.ulisboa.pt; gsoveral@ff.ulisboa.pt

² Department of Biochemistry and Human Biology, Faculty of Pharmacy, Universidade de Lisboa, 1649-003 Lisboa, Portugal

³ Department of Pharmaceutical Technology, Faculty of Pharmacy, Universidade de Lisboa, 1649-003 Lisboa, Portugal

⁴ Universität Wien, Fakultät für Chemie, Institut für Biophysikalische Chemie, 1090 Vienna, Austria; nadiia.gumerova@univie.ac.at; annette.rompel@univie.ac.at

⁵ Faculdade de Ciências e Tecnologia (FCT), CCMar, Universidade do Algarve, 8005-139 Faro, Portugal; maalves@ualg.pt

† authors contributed equally to this work

* Correspondence: gsoveral@ff.ulisboa.pt, Tel: +351-217-946-461 (G.S.); maalves@ualg.pt, Tel: +351-289-900-805 (M.A.)

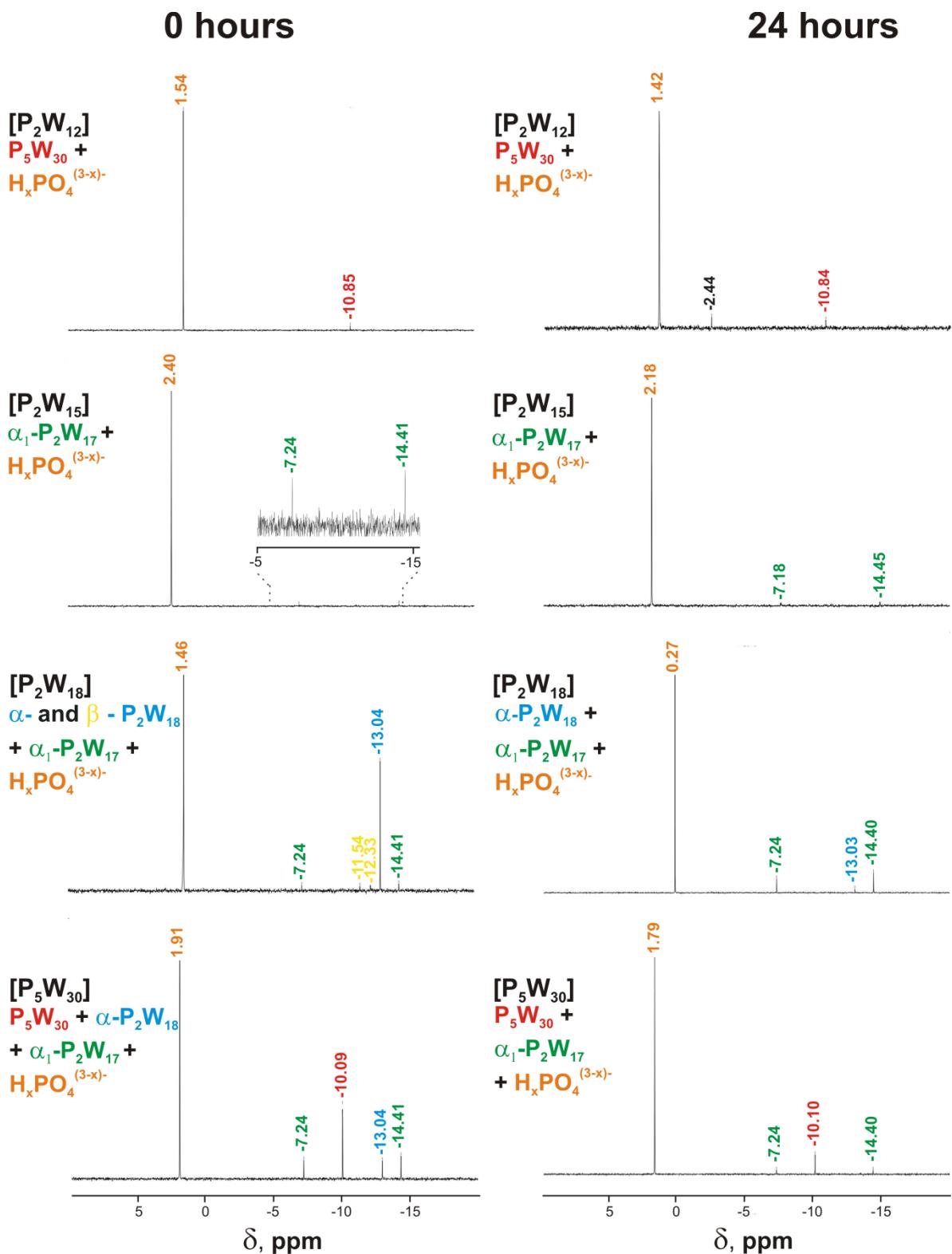


Figure S1. ³¹P-NMR spectra of P₅W₃₀, P₂W₁₈, P₂W₁₂ and P₂W₁₅ in PBS medium at pH 7.4, recorded after preparation (0 hours) and after 24 hours of incubation at 37 °C. In phosphate formula x = 0-2.

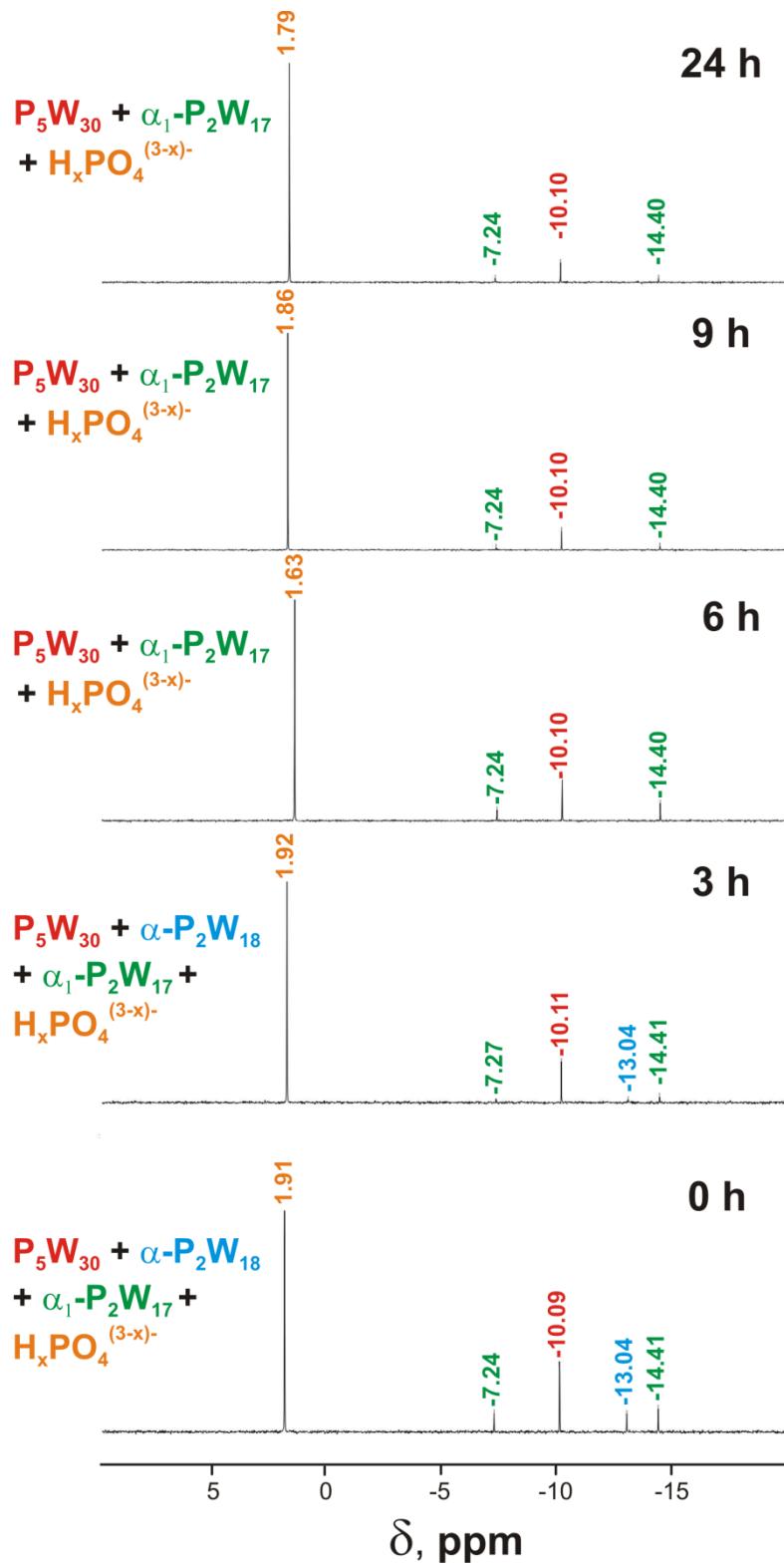


Figure S2. ^{31}P -NMR spectra of $\mathbf{P_5W_{30}}$ in PBS medium at pH 7.4, recorded after different time intervals of incubation at 37°C . In phosphate formula $x = 0\text{-}2$.

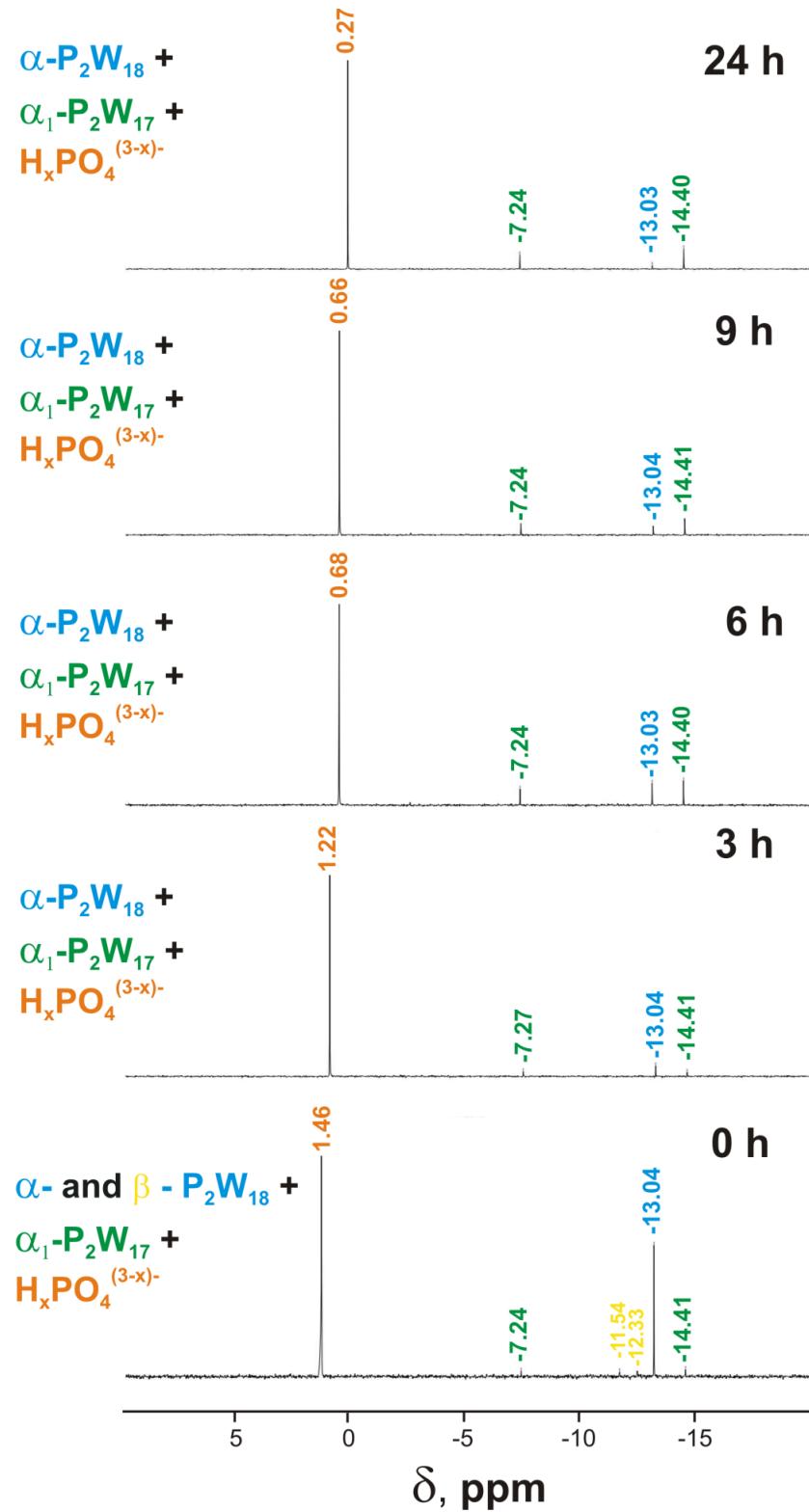


Figure S3. ^{31}P -NMR spectra of P_2W_{18} in PBS medium at pH 7.4, recorded after different time intervals of incubation at 37 °C. In phosphate formula $x = 0\text{-}2$.

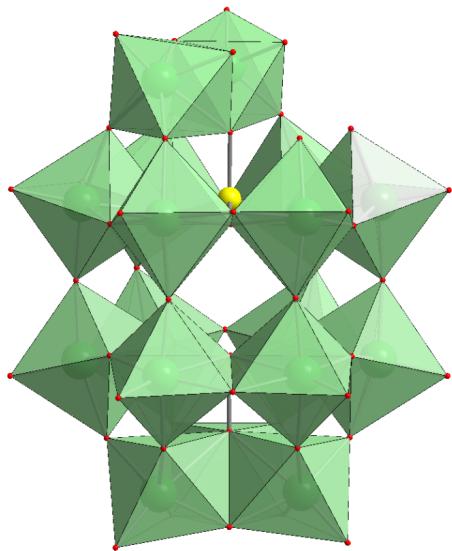


Figure S4. Polyhedral representation of $[P_2W_{17}O_{61}]^{10-}$. Color code: WO_6 , mint; P, yellow; O, red.

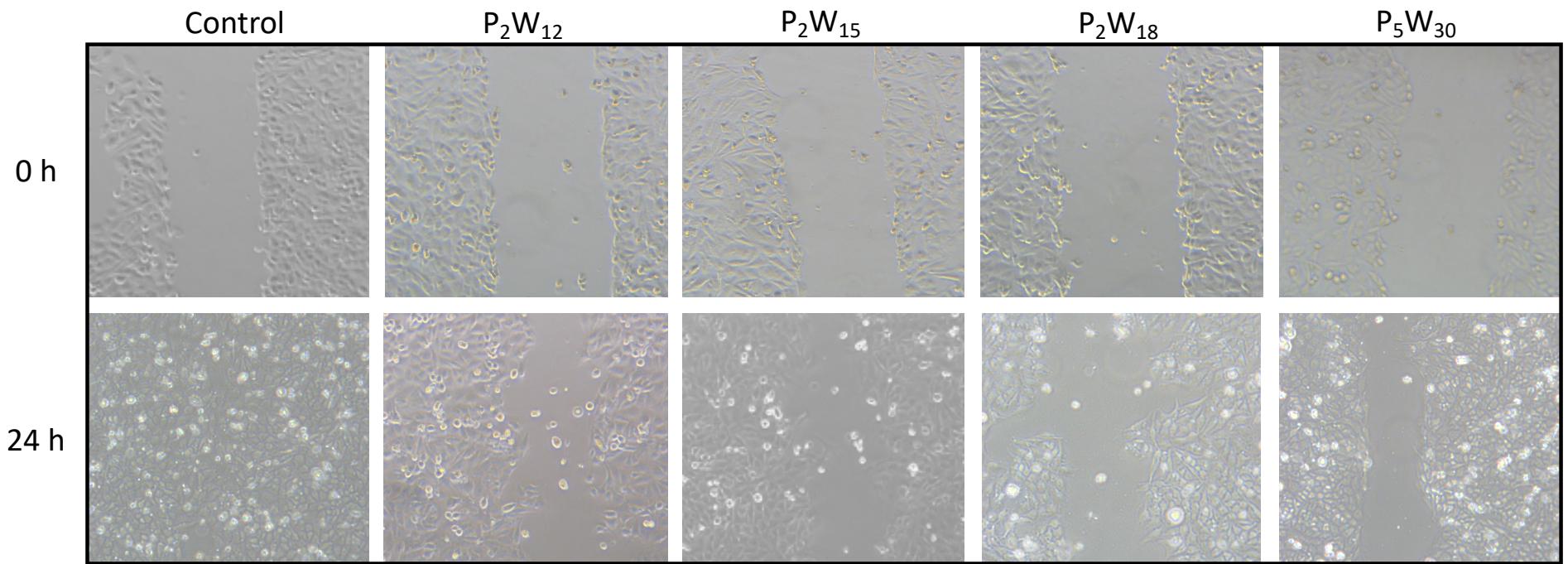


Figure S5. Effect of POTs on cell migration of human melanoma cells. Representative images of wound closure progression in cells non-treated (Control) and treated with 5 μ M POTs at 0 and 24 h.