

SUPPLEMENTARY INFORMATION

Polyoxometalates Function as Indirect Activators of a G Protein-Coupled Receptor

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Summary

Fig. S1 The ⁵¹V NMR spectra (left) and EPR (right) of 1.0 mmol L⁻¹ aqueous solution of **V₁** with pH adjusted to 7.4 is shown as a function of time for 34 h. The signals with δ in ppm are assigned to **V₁** = H₂VO₄⁻ (-554), **V₂** = H₂V₂O₇²⁻ (-570), and **V₄** = V₄O₁₂⁴⁻ (-575 ppm).3

Fig. S2 The ⁵¹V NMR spectra (left) and EPR (right) of 1.0 mmol L⁻¹ aqueous solution of **V₁₀** with pH adjusted to 7.4 is shown as a function of time for 34 h. The signals with δ in ppm are assigned to **V₁** = H₂VO₄⁻ (-557), **V₂** = H₂V₂O₇²⁻ (-571), **V₄** = V₄O₁₂⁴⁻ (-575), and **V₁₀** = HV₁₀O₂₈⁵⁻ (-422, -497 and -512 ppm).3

Fig. S3 The ⁵¹V NMR spectra (left) and EPR (right) of 1.0 mmol L⁻¹ aqueous solution of **V₁₄** with pH adjusted to 7.4 is shown as a function of time for 34 h. The signals with δ in ppm are assigned to **V₁** = H₂VO₄⁻ (-558), **V₂** = H₂V₂O₇²⁻ (-571), **V₄** = V₄O₁₂⁴⁻ (-575), **V₁₀** = HV₁₀O₂₈⁵⁻ (-423, -498 and -514) and **V^V₁₄** = H₄V₁₄O₄₂P⁵⁻ (-517, -566, and -584 ppm).4

Fig. S4 The ⁵¹V NMR spectra (left) and EPR (right) of 1.0 mmol L⁻¹ aqueous solution of **V₁₅** with pH adjusted to 7.4 is shown as a function of time for 34 h. The signals with δ in ppm are assigned to **V₁** = H₂VO₄⁻ (-558), **V₂** = H₂V₂O₇²⁻ (-571), **V₄** = V₄O₁₂⁴⁻ (-576) and **V₅** = V₅O₁₅⁵⁻ (-584 ppm).4

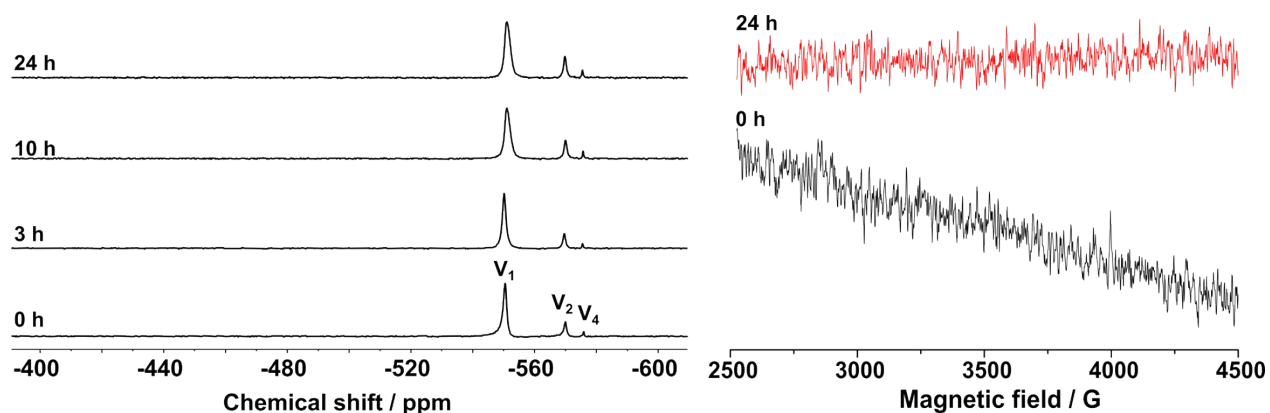


Fig. S1 The ^{51}V NMR spectra (left) and EPR (right) of 1.0 mmol L $^{-1}$ aqueous solution, pH 7.4, of V_1 is shown as a function of time for 34 h. The signals with δ in ppm are assigned to $\text{V}_1 = \text{H}_2\text{VO}_4^-$ (-554), $\text{V}_2 = \text{H}_2\text{V}_2\text{O}_7^{2-}$ (-570), and $\text{V}_4 = \text{V}_4\text{O}_{12}^{4-}$ (-575 ppm).

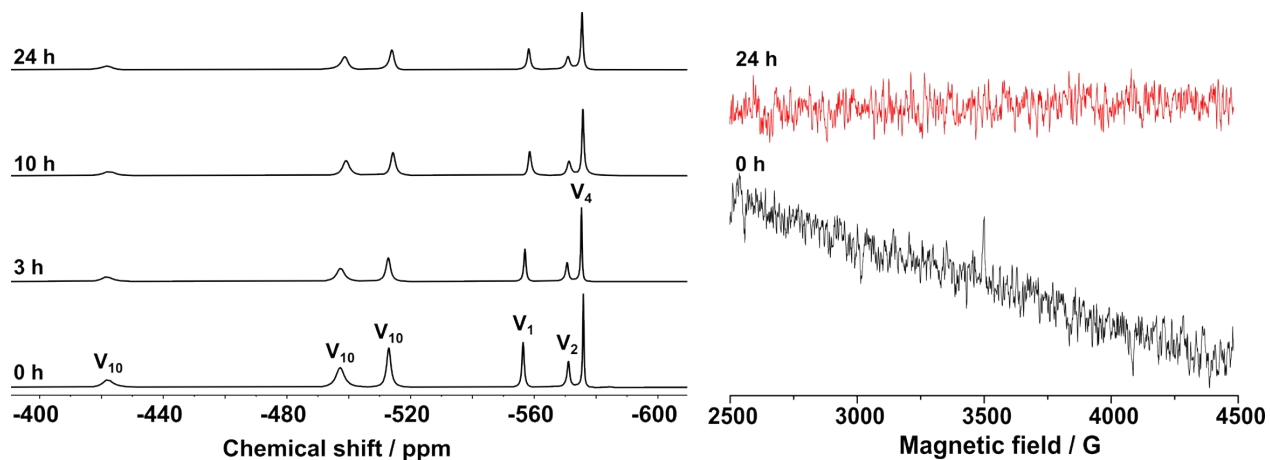


Fig. S2 The ^{51}V NMR spectra (left) and EPR (right) of 1.0 mmol L $^{-1}$ aqueous solution, pH 7.4, of V_{10} is shown as a function of time for 34 h. The signals with δ in ppm are assigned to $\text{V}_1 = \text{H}_2\text{VO}_4^-$ (-557), $\text{V}_2 = \text{H}_2\text{V}_2\text{O}_7^{2-}$ (-571), $\text{V}_4 = \text{V}_4\text{O}_{12}^{4-}$ (-575), and $\text{V}_{10} = \text{HV}_{10}\text{O}_{28}^{5-}$ (-422, -497 and -512 ppm).

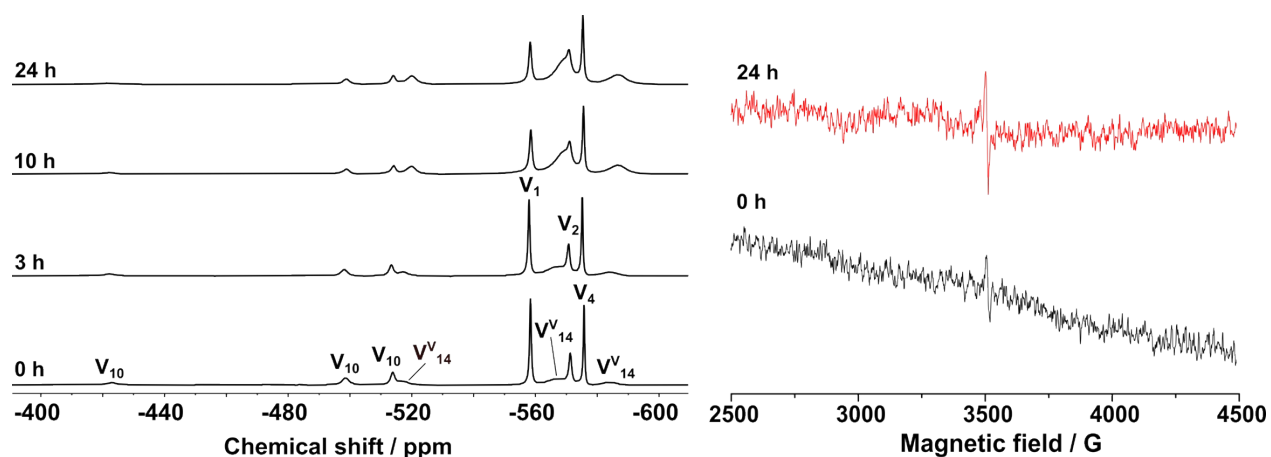


Fig. S3 The ^{51}V NMR spectra (left) and EPR (right) of 1.0 mmol L $^{-1}$ aqueous solution, pH 7.4, of V_{14} is shown as a function of time for 34 h. The signals with δ in ppm are assigned to $\text{V}_1 = \text{H}_2\text{VO}_4^-$ (-558), $\text{V}_2 = \text{H}_2\text{V}_2\text{O}_7^{2-}$ (-571), $\text{V}_4 = \text{V}_4\text{O}_{12}^{4-}$ (-575), $\text{V}_{10} = \text{HV}_{10}\text{O}_{28}^{5-}$ (-423, -498 and -514) and $\text{V}_{14}^{\text{V}} = \text{H}_4\text{V}_{14}\text{O}_{42}\text{P}^{5-}$ (-517, -566, and -584 ppm).

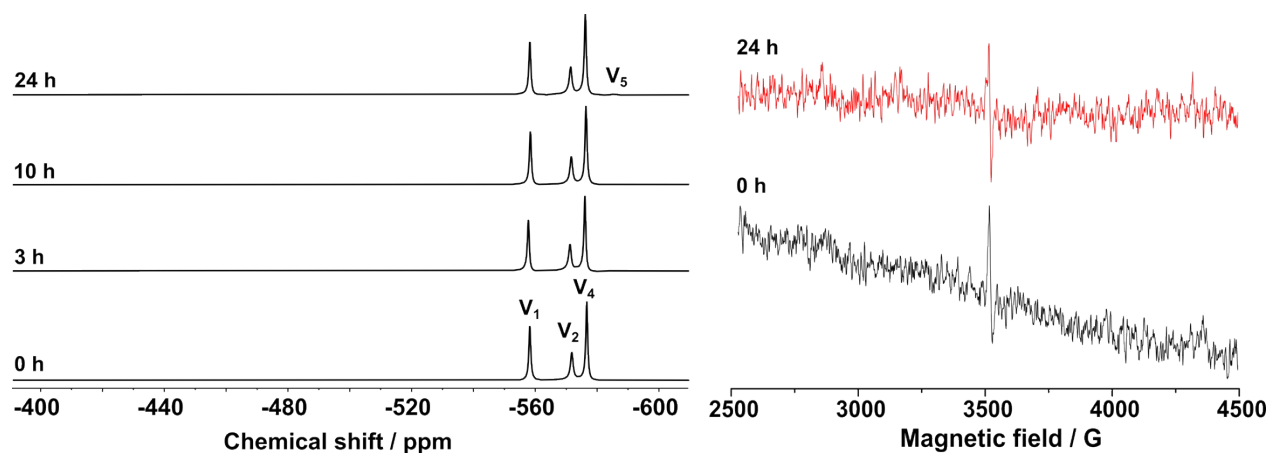


Fig. S4 The ^{51}V NMR spectra (left) and EPR (right) of 1.0 mmol L $^{-1}$ aqueous solution, pH 7.4, of V_{15} is shown as a function of time for 34 h. The signals with δ in ppm are assigned to $\text{V}_1 = \text{H}_2\text{VO}_4^-$ (-558), $\text{V}_2 = \text{H}_2\text{V}_2\text{O}_7^{2-}$ (-571), $\text{V}_4 = \text{V}_4\text{O}_{12}^{4-}$ (-576) and $\text{V}_5 = \text{V}_5\text{O}_{15}^{5-}$ (-584 ppm).