

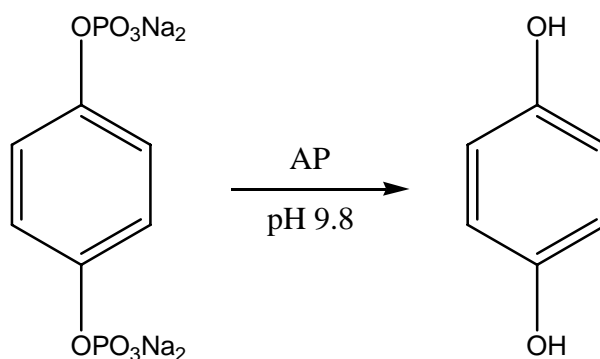
# DROPSSENS

## ***Hydroquinone diphosphate*** (ref. *HQDP*)

*DropSens* launches *Hydroquinone diphosphate* (HQDP).

*Hydroquinone diphosphate* is intended for its use as electrochemical substrate of Alkaline Phosphatase (AP). This reagent generates electrochemically active *hydroquinone* as the product after its hydrolysis. Voltammetric and amperometric measurements can be easily carried out for the quantification of *hydroquinone* in affinity assays using the *HQDP*/AP detection system.

### **Enzymatic reaction of *HQDP***



The use of *HQDP*, instead of other AP substrates, results in lower LODs, wider linear ranges and a simpler methodology for the detection of the enzymatic product. Moreover the applied potential for oxidation of *Hydroquinone* is lower than the potential for oxidation of other AP substrates hydrolysis products, which reduces the number of potential interferences able to be oxidised at the electrode surface.



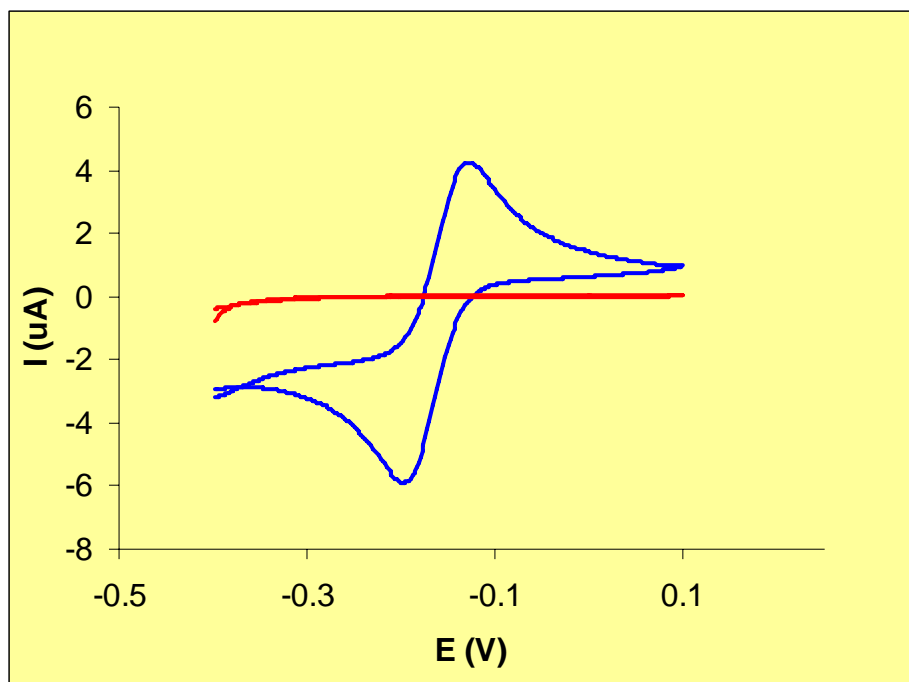
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## Electrochemical behaviour of *Hydroquinone diphosphate* in absence and presence of alkaline phosphatase using DRP-110 screen-printed carbon electrodes

Cyclic voltammetry of the hydrolysis product at the surface of screen-printed carbon electrodes shows a well-defined oxidation and reduction peaks at -0.15 V (vs. Ag-pseudoreference electrode).



Cyclic voltammogram of 3 mM HQDP (—) and 3 mM HQDP + Alkaline phosphatase (—) in 0.1 M Tris-HNO<sub>3</sub>, 20 mM Mg(NO<sub>3</sub>)<sub>2</sub>, pH 9.8 electrolyte solution at 50 mV/s.

HQDP should be stored at 4 °C, under a N<sub>2</sub> atmosphere and kept away from light.



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**Further information is available upon request**