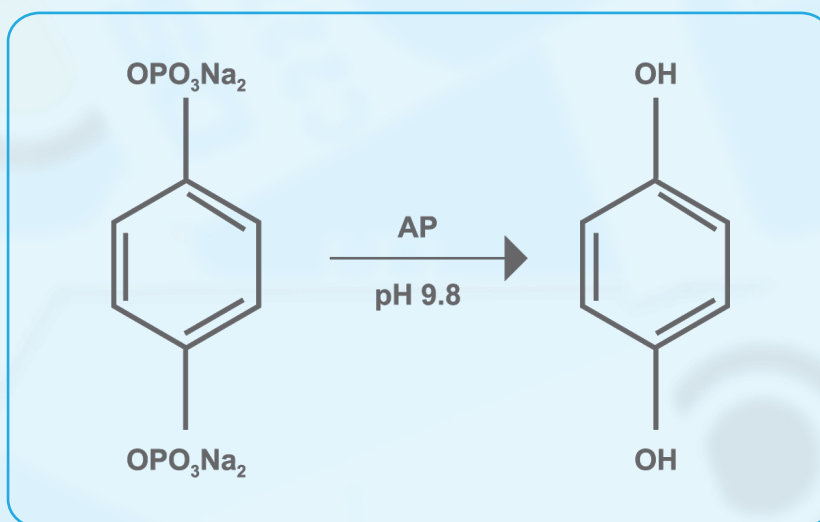


Hydroquinone Diphosphate

Ref. HQDP

Enzymatic reaction of HQDP



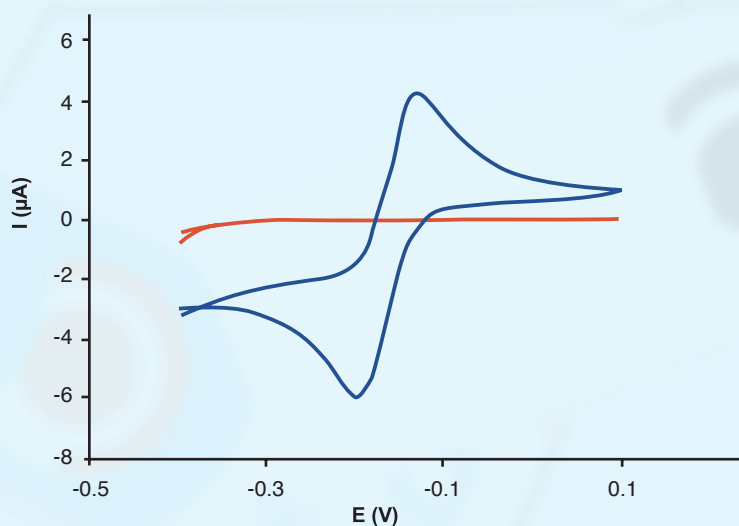
DropSens launches **Hydroquinone diphosphate** (ref. HQDP).

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 *HQDPIAP* detection system.

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.

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-HNO₃, 20 mM Mg(NO₃)₂, pH 9.8 electrolyte solution at 50 mV/s.

HQDP should be stored at 4 °C, under a N₂ atmosphere and kept away from light.

Related products

