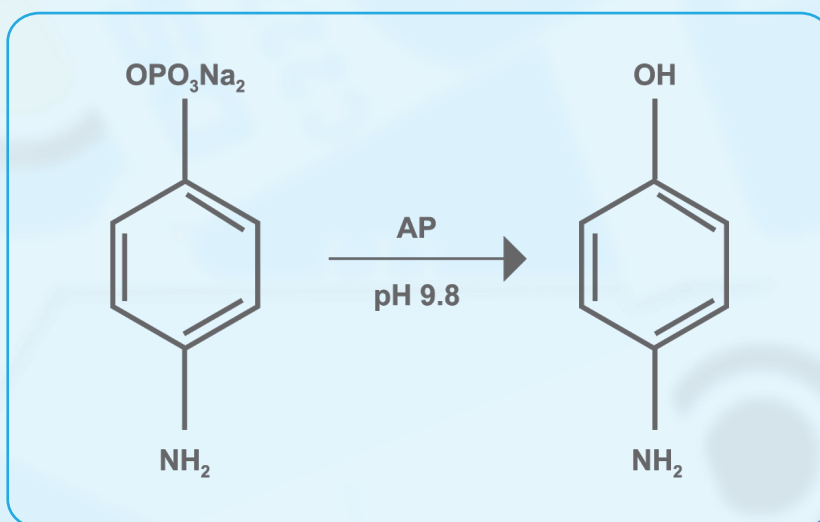


### Enzymatic reaction of p-APP



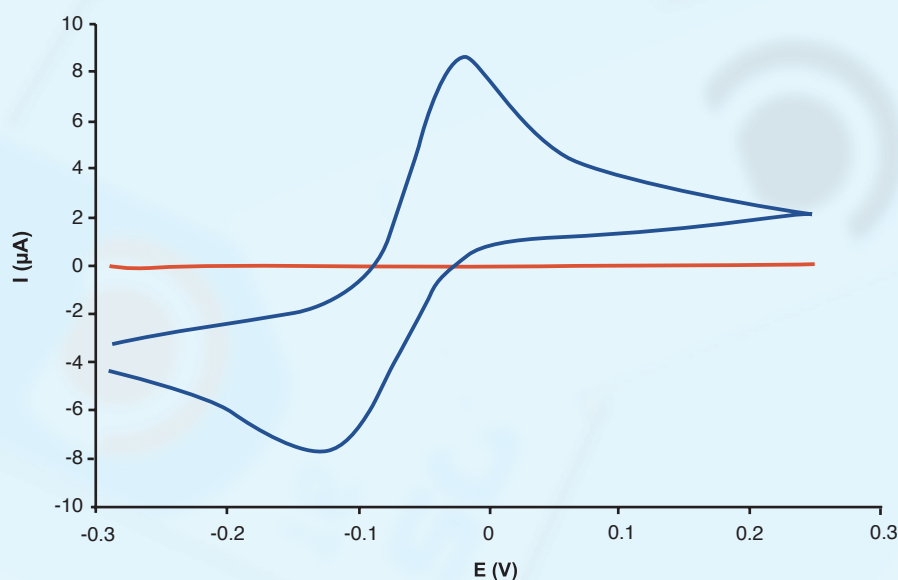
**DropSens** launches **p-AminoPhenyl Phosphate** (ref. PAPP).

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

The use of PAPP, 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 *p*-aminophenol is lower** than the potential for oxidation of other AP substrates hydrolysis products, which reduces the number of potential interferents able to be oxidised at the electrode surface.

## Electrochemical behaviour of *p*-AminoPhenyl Phosphate and *p*-Aminophenol using DRP-110 screen-printed carbon electrodes.

Cyclic voltammetry of the hydrolysis product at the surface of screen-printed carbon electrodes shows **well-defined oxidation and reduction peaks**. Furthermore the  $\Delta E_p$  value indicates that the electrode reaction is quasi-reversible.



Cyclic voltammogram of 3 mM *p*-APP (—) and 3 mM *p*-APP + 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.

*p*-APP should be stored between 2 and 8 °C, under a N<sub>2</sub> atmosphere and away from light.

### Related products

