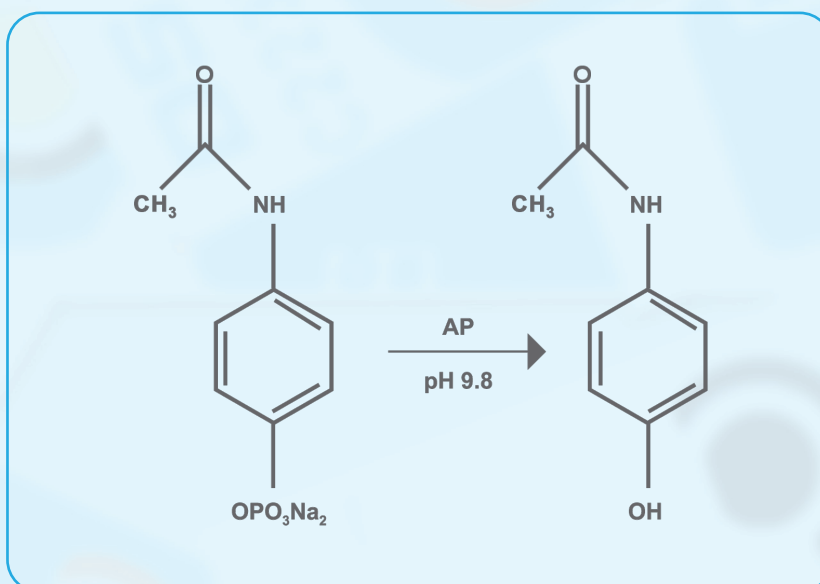


Enzymatic reaction of PPAR



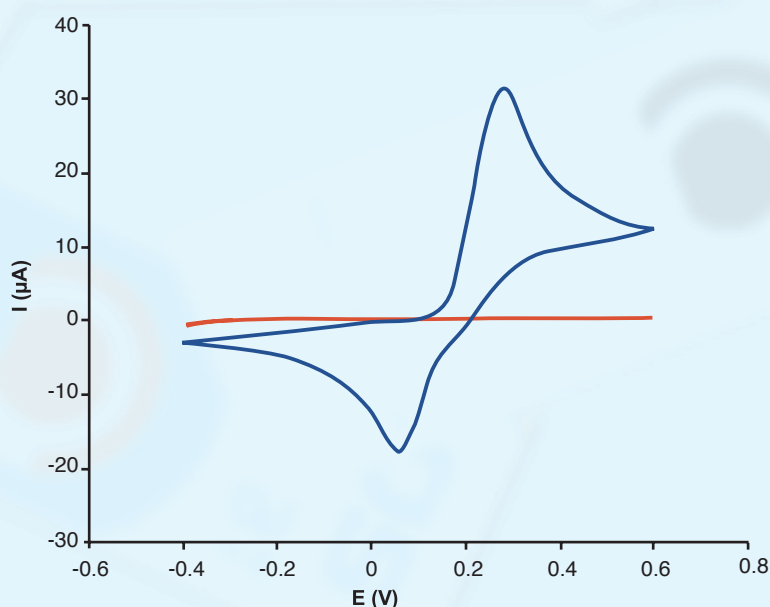
DropSens launches **Phosphorylated Paracetamol** (ref. PPAR).

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

The use of PPAR, 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 paracetamol 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 *Phosphorylated Paracetamol* and *Paracetamol* 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 ΔE_p value indicates that the electrode reaction is quasi-reversible.



Cyclic voltammogram of 3,5 mM PPAR (—) and 3,5 mM PPAR + Alkaline Phosphatase (—) in 0.1 M Tris-HNO₃, 20 mM Mg(NO₃)₂, pH 9.8 electrolyte solution at 50 mV/s.

PPAR should be stored between 2 and 8 °C, under a N₂ atmosphere and away from light.

Related products

