

Electronic Supplementary Information

for

Smartphone-readable Barcode Assay for the Detection and Quantitation of Pesticide Residues

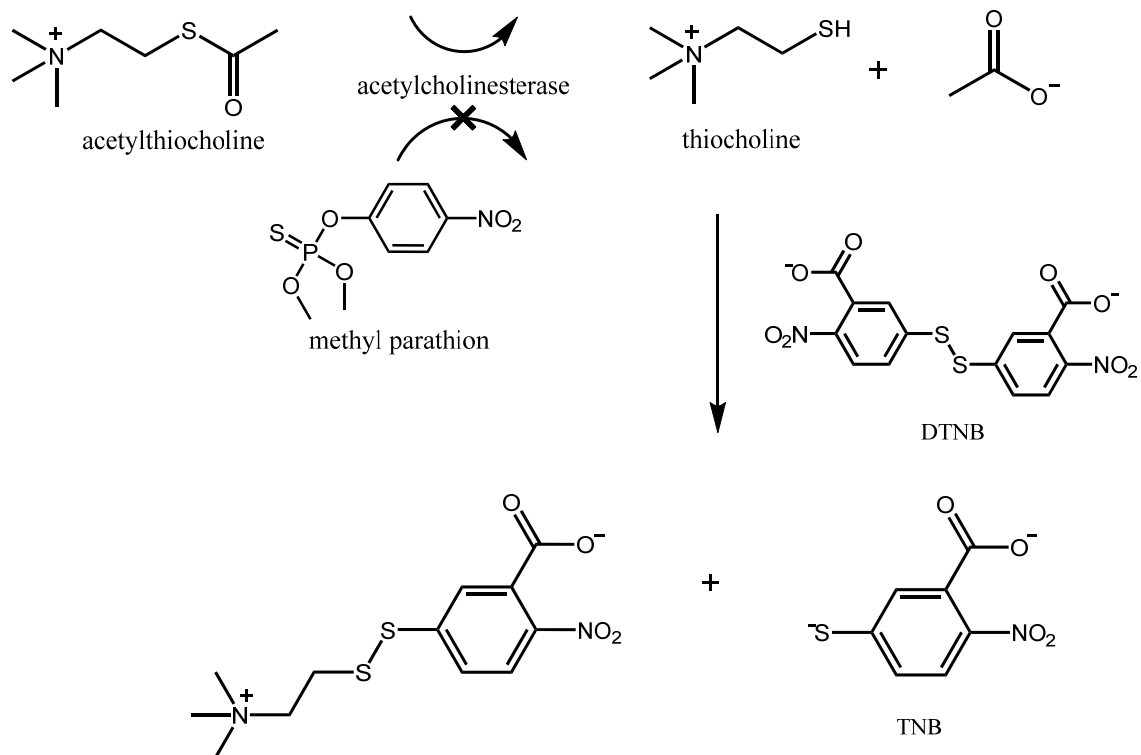
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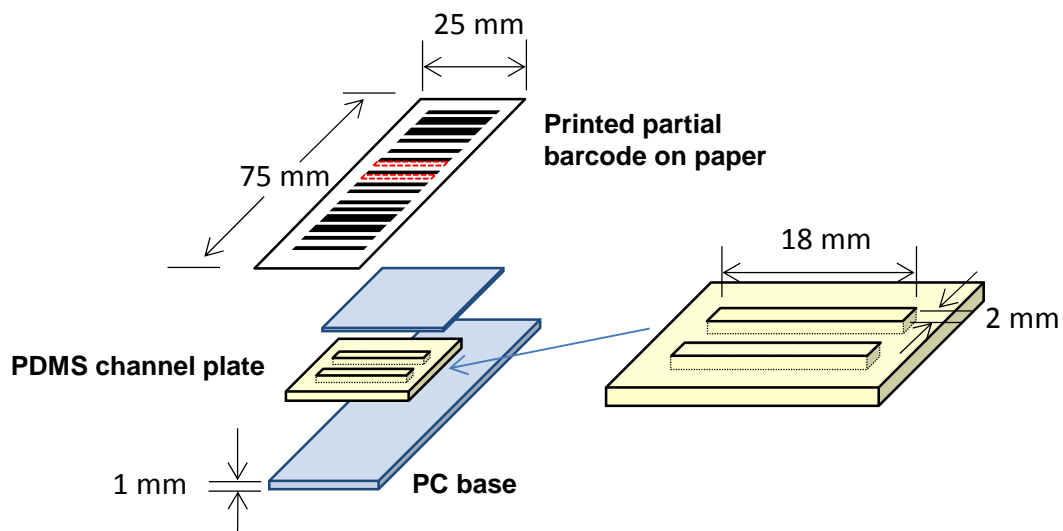
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Scheme S1: Detection of methyl parathion based on the irreversible inhibition of the activity of acetylcholinesterase (AChE). AChE catalytically hydrolyzes acetylthiocholine iodide (ATCh) in phosphate buffer (pH = 8.0) to thiocholine that in turn dissociates dithio-bisnitrobenzoate (DTNB) to produce a yellow colored product (TNB).



Scheme S2: Dimensions of the barcode assay chip (not to the actual scale); the positions of the channels are highlighted with red dashed lines.