

## **▶** ¶ ecoflex

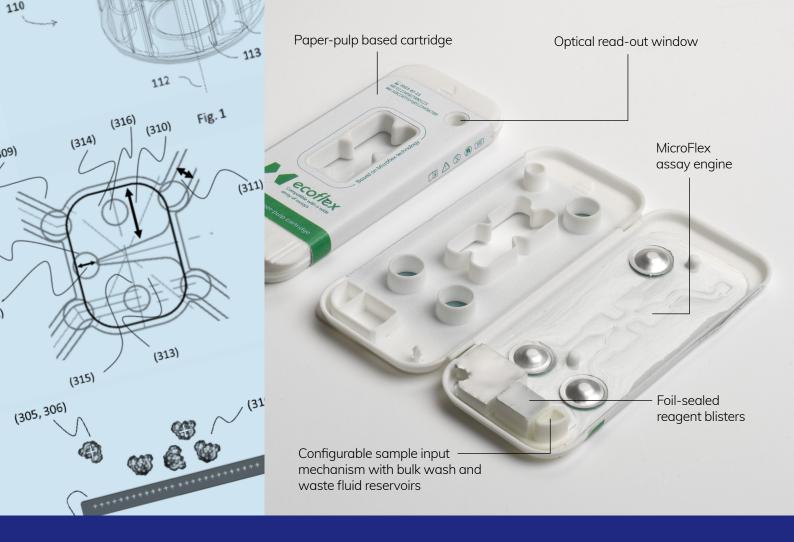
The proliferation of single-use diagnostic tests is enabling wider, de-centralised access to diagnostics around the world but the environmental impact of the vast quantity of plastic waste incinerated as a result is leading to a re-think in how such tests are manufactured.

ecoFlex is TTP's latest innovation as part of this reduced-plastic transition. Manufactured using <2g of plastic material, the novel paper-pulp cartridge is still able to deliver a central-lab quality ELISA workflow by leveraging the existing well-developed microFlex technology developed by TTP with Prolight Diagnostics.

With a target cost of <\$1, ecoflex cartridges are competitive with existing lateral-flow strips whilst delivering the quantitative performance of a central-lab, developed with sustainable material manufacturing at its heart.

Together with Prolight, TTP are now looking for partnership companies to help bring this innovative product to market. \*

Lab-quality immunoassay delivered in a cost-effective, low-plastic format.



#### **Performance**

Based on the existing, patented, microflex immunoassay-engine, with the capability to run paramagnetic bead-based immunoassays with chemiluminescent detection, it is straightforward to translate existing lab-based ELISA protocols to the platform.

The data on the right shows the result of directly translating two existing lab-based assays onto the microFlex immunoassay-engine at the heart of the ecoflex cartridge. Without lengthy assay re-optimisation, the protocols were transferred to the prototype microFlex system and produced good correlation against the established central-lab tests.

#### Key features

- Direct translation of existing lab-based ELISA workflows
- Cartridge COGS targeting <\$1
- Compatible with a wide range of input sample types
- Uses 95% less plastic than the equivalent quality central-lab based test (estimated based on Eppendorf and single-use pipettes used during a typical lab-based ELISA workflow)

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### Microflex prototype system vs Roche Cobas

