

## Creative Bioarray Launches Comprehensive Cytochrome P450 Induction Assay for Enhanced Drug Development Insights

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NEW YORK CITY, NY, UNITED STATES, March 3, 2025 /EINPresswire.com/ -- Creative Bioarray, a premier provider of innovative life science solutions, is proud to announce the launch of its advanced Cytochrome P450 (CYP450) Induction Assay service, tailored for researchers and pharmaceutical companies aiming to improve the drug development process and ensure patient safety.

Cytochrome P450 enzymes are critical players in the metabolism of a variety of pharmaceuticals, particularly within the liver, where they catalyze the oxidation of numerous drugs. The induction of these enzymes can lead to significant interactions that affect drug concentrations, potentially resulting in adverse drug reactions or diminishing therapeutic effects. Consequently, understanding how new chemical entities (NCEs) might induce CYP450 enzymes is essential for accurate forecasting of drug-drug interactions, thereby enhancing drug efficacy and minimizing risks.

Creative Bioarray's <u>CYP450 Induction Assay</u> leverages state-of-the-art technology and is conducted using cryopreserved human hepatocytes from diverse donors. This robust assay examines vital CYP isoforms, including CYP1A2, CYP2B6, and CYP3A4, enabling researchers to evaluate the pharmacokinetic behavior of their compounds. The assay encompasses customizable testing options, allowing clients to select multiple test concentrations to cater to their specific research needs.

The assay process includes advanced methodologies such as qRT-PCR to assess relative mRNA expression levels in conjunction with LC-MS/MS for the quantification of substrate metabolites. This dual approach guarantees comprehensive and reliable data that can inform critical decisions during the drug development process. Upon completion of the assay, clients receive detailed reports that outline Emax, EC50 values, and fold-induction levels relative to positive controls, providing a clear picture of drug influence on metabolic pathways.

Our service is not only committed to delivering high-quality data but also aims to expedite timelines for clients. The rapid turnaround and dedicated technical support from our

experienced team ensure that clients can progress their projects without unnecessary delays.

"Our aim is to equip researchers with cutting-edge tools to navigate the complexities of drug metabolism," stated Hannah Cole, the marketing director of Creative Bioarray. "The introduction of our CYP450 Induction Assay embodies our dedication to fostering innovative research that ultimately enhances drug safety and efficacy."

Creative Bioarray invites pharmaceutical researchers to explore the capabilities of our CYP450 Induction Assay and discover its potential to inform drug development strategies effectively.

## **About Creative Bioarray**

Creative Bioarray is a pioneering life science enterprise specializing in comprehensive solutions for drug discovery, development, and safety. With a steadfast commitment to innovation and quality, we provide researchers worldwide with advanced tools and services tailored to meet the evolving demands of the biopharmaceutical industry.

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