

Cytochrome P450 3A4 Screening Systems

Cat. No. KITZ-100 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Cytochrome P450 3A4 Screening Systems provide a luminescent method to measure cytochrome P450 3A4 activity. The assays measure the activities of CYP 3A4 from recombinant and native sources and test the effects of drugs and new chemical entities on CYP 3A4 activities. All of these assays can be used for cell-free CYP 3A4 inhibition studies. The P450-Glo Substrates are CYP enzyme substrates that are proluciferins, derivatives of beetle luciferin [(4S)-4,5-dihydro-2-(6'-hydroxy-2'-benzothiazolyl)-4-thiazolecarboxylic acid]. The derivatives are converted by CYP enzymes to luciferin products. d-luciferin is formed and detected in a second reaction with the Luciferin Detection Reagent. The amount of light produced in the second reaction is proportional to CYP activity.
Storage	Store components at –20°C. Store components protected from light. Store CYP enzyme preparations purchased separately at –70°C.
Size	Each system contains sufficient reagents for 200 biochemical assays at 50µl per assay in 96-well plates.
Kit Components	1 × 15µl Luciferin-IPA, 3mM 1 vial Luciferin Detection Reagent (lyophilized) 1 × 10ml Reconstitution Buffer with esterase
Materials Required but Not Supplied	1. 1M KPO4 buffer (pH 7.4) 2. distilled or deionized water 3. active CYP preparation that includes cytochrome b5 4. preparation that lacks CYP activity for the minus-P450 control reactions 5. NADPH Regeneration System 6. white opaque polystyrene nontreated flat-bottom multiwell plates Do not use treated plates, black plates or clear

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

plates. 7. luminometer or charge-coupled device (CCD) capable of reading multiwell plates (If using a multifunctional reader be sure it is operating in the luminescence, not fluorescence, mode.) 8. Optional: multichannel pipette or automated pipetting station

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA