

## THE SYSTEM THAT MAKES A SCIENCE OUT OF FLEXIBILITY



**MicroBeta<sup>2</sup> Plate Counter** Advanced capabilities for radiometric and luminescence detection



# EASY AS PUTTING TWO AND TWO TOGETHER

## The sensitivity, flexibility – and results – you can rely on

Whether you're working with GPCRs, kinases, reporter gene assays, or traditional liquid scintillation counting, the MicroBeta<sup>2</sup> and MicroBeta<sup>2</sup> LumiJET platforms deliver superior sensitivity and performance for all the radiometric and luminescence applications you depend on.

#### MicroBeta<sup>2</sup>: Higher efficiency, better sensitivity

The MicroBeta<sup>2</sup> system provides coincidence counting, a unique patented detector configuration with two photomultiplier tubes that detect the signal simultaneously. This configuration ensures high efficiency and extremely low background for a variety of radionuclides.

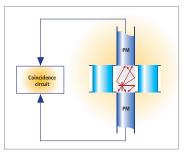
Luminescence detection is conducted using the single photon counting method to achieve the lowest possible background and good counting efficiency for greater sensitivity.

Time-resolved Liquid Scintillation Counting (TR-LSC) is one of the key features of the MicroBeta<sup>2</sup> platform. The patented TR-LSC counting mode delivers improved counting performance for opaque plates where traditional coincidence counting isn't possible. TR-LSC mode also offers great performance when combined with FlashPlate<sup>®</sup> products, UniFilter<sup>®</sup> plates, and LumaPlates<sup>®</sup>.

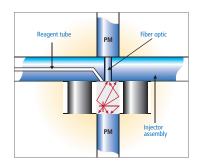
#### MicroBeta<sup>2</sup> LumiJET: Better quality, fewer false positives

MicroBeta<sup>2</sup> LumiJET delivers all the features of MicroBeta<sup>2</sup>, plus injectors for applications where direct injection of reagents is required. The MicroBeta<sup>2</sup> LumiJet also delivers advanced aequorin (agonist/antagonist) technology – so you can develop assays more efficiently, screen with unprecedented sensitivity and reliability, and do more with your research than ever before. In addition, you get:

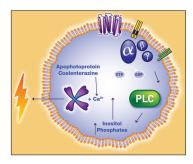
- Choice of single- or dual-channel injectors: A dual- channel injector allows you to run dual aequorin screens without the need of an external dispensing device
- Availability in 1- , 2- , 6- , or 12-detector configurations: Multiple detectors can be used simultaneously to maximize throughput
- 16-plate capacity or robot-loading interface
- Support of up to 384-well plates
- Real-time kinetic data acquisition and display



Detection system in MicroBeta<sup>2</sup> for radionuclides.



MicroBeta<sup>2</sup> LumiJET measuring setup is optimized for best luminescence sensitivity and accurate dispensing.



Aequorin technology uses AequoScreen or AequoZen<sup>®</sup> (frozen, ready-to-use) cells to study activation of GPCRs.

### More assays than ever before – from one powerful system

One system, and so many assays to choose from:

- Advanced Detection Enables detection of beta and gamma isotopes, as well as glow and flash luminescence
- GPCR Assays MicroBeta<sup>2</sup> LumiJET, combined with AequoScreen<sup>®</sup> or PhotoScreen<sup>™</sup> flash luminescence technologies – the ultimate choice for GPCR assays
- Filtration-based Receptor Binding Assays Deliver utmost sensitivity using either UniFilter plates or MicroBeta filtermats
- Solid-phase Homogeneous Assays MicroBeta<sup>2</sup> for best-inclass performance in all solid scintillation assays, including beadbased scintillation proximity assays and FlashPlate assays
- **Cell Proliferation** MicroBeta<sup>2</sup>, the perfect choice for analyzing cell proliferation through filter-based 3H-labeled thymidine uptake
- Cell Cytotoxicity <sup>51</sup>Cr release assays for cell cytotoxicity using LumaPlate technology or liquid scintillation counting (LSC)
- **Reporter Gene Assays** Glow and flash luminescence capabilities for dual reporter gene assays using luciferase and beta lactamase
- Metabolic Studies HPLC fraction measurements using LumaPlate technology or traditional cocktail-based approaches in 4-mL tubes
- Liquid Scintillation Counting Scaled down traditional vial-based liquid scintillation counting assays to microplates
- Wipe Test No need to reserve a second counter for monitoring contamination in your laboratory
- More Options Luminometric ELISAs, kinase assays, radioimmunoassays (RIAs), and many others

MicroBeta<sup>2</sup> LumiJET and MicroBeta<sup>2</sup> Plate Counters

#### Choose the format that best suits your application

All the consumables and peripherals to help you get the results you've been looking for:

- Microplates in 24-, 96-, and 384-well formats; rigid opaque plates for luminescence assays; and isoplates and flexible plates for liquid scintillation counting with cocktails
- Filter plates, LumaPlate, FlashPlate technology, and more
- Choose the right filter for your assay from different filter plates like UniFilter plates, or MicroBeta<sup>2</sup>-specific filtermats
- Scale down your vial counting assays with LSC minivials (4 mL) to improve throughput
- Eppendorf® microtubes up to 2 mL

All MicroBeta<sup>2</sup> Plate Counters are manufactured according to ISO 13485 and ISO 9001 quality management systems.

#### Your entry point to a comprehensive, end-to-end solution

Best of all, we deliver an unmatched portfolio of products, including cellular assays, radioisotopic technologies, cellular screening and imaging, state-of-the-art detection instrumentation, and automated liquid handling – plus a complete menu of services for GPCR cell-line generation, assay development, integration solutions, and much more.

To learn more, call 1-800-762-4000, 203-925-4602 or visit www.perkinelmer.com/MicroBeta2

PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

Copyright ©2009-2014, PerkinElmer, Inc. All rights reserved. PerkinElmer<sup>®</sup> is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.

PKI