THE SYSTEM THAT MAKES A SCIENCE OUT OF FLEXIBILITY

Radiometric Applications Menu
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- Filtration-based Receptor Binding Assays
- Cell Proliferation
- Cell Cytotoxicity
- Reporter Gene Assays
- Metabolic Studies
- Liquid Scintillation Counting
- Wipe Test
- GPCR Assays

Advance Detection Capabilities

MicroBeta² Plate Counter
Advanced capabilities for radiometric and luminescence detection

PerkinElmer
For the Better
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 MicroBeta² and MicroBeta² LumiJET platforms deliver superior sensitivity and performance for all the radiometric and luminescence applications you depend on.

MicroBeta²: Higher efficiency, better sensitivity

The MicroBeta² 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 MicroBeta² 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® products, UniFilter® plates, and LumaPlates®.

MicroBeta² LumiJET: Better quality, fewer false positives

MicroBeta² LumiJET delivers all the features of MicroBeta², plus injectors for applications where direct injection of reagents is required. The MicroBeta² 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

Aequorin technology uses AequoScreen or AequoZen® (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** MicroBeta² LumiJET, combined with AequoScreen® or PhotoScreen™ 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** MicroBeta² for best-in-class performance in all solid scintillation assays, including bead-based scintillation proximity assays and FlashPlate assays
- **Cell Proliferation** MicroBeta², the perfect choice for analyzing cell proliferation through filter-based 3H-labeled thymidine uptake
- **Cell Cytotoxicity** ⁵¹Cr 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

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 MicroBeta²-specific filtermats
- Scale down your vial counting assays with LSC minivials (4 mL) to improve throughput
- Eppendorf® microtubes up to 2 mL

All MicroBeta² 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