



Are GPCR targets your priority?

With over 40% of drug discovery focused on GPCR targets, the need for reliable, proven and versatile assays, reagents and instrumentation to understand these complex signaling mechanisms has never been greater.

The PerkinElmer team understands the significant challenges of identifying biologically and pharmacologically relevant pathways. Scientist to scientist, we have the depth of experience in both cellular and biochemical platforms to support your work every step of the way.

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PerkinElmer gives you easy access to a worldwide network of local support offices, staffed by expert professionals who speak your language. You'll get expert assistance for all your questions – no matter where you are located. Contact us at (800) 762-4000 or (+1) 203-925-4602, or visit www.perkinelmer.com/offices.

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All the GPCR you need

- Advanced Assays and Reagents
- Validated Stable Cell Lines
- Superior Radioisotopic Technologies
- Comprehensive Assay Development Services
- Powerful Cellular Imaging and Analysis
- High-performance Detection Instruments
- Robust Automation and Liquid Handling



get a **complete** serving of **GPCR** assays, instruments and services

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Only PerkinElmer gives you so many GPCR essentials in one package

PerkinElmer is unequalled in providing an integrated solution that accelerates your research and advances drug discovery.

Right from the start, we can help you determine the best strategy to identify and monitor:

- Effects of GPCR activation: changes in intracellular calcium, cAMP, phospho-ERK, inositol phosphate
- Reporter gene expression
- Receptor ligand binding
- GTP binding

Our state-of-the-art solutions portfolio is extensive and includes:

- Innovative **assay platforms** coupled with optimized cell-based readout
- Versatile **reagents** – Validated GPCR cell lines, radioligands, ligands and cloned receptor membranes
- **Microplates** tested and validated on PerkinElmer instruments with PerkinElmer assay technologies
- High-performance **detection instrumentation** for radiometric, fluorescence, luminescence or photometric detection
- Unparalleled state-of-the-art **high content screening** platforms including confocal imaging systems, data analysis software, automation, image and data library software
- Modular, scalable **automation** and **liquid handling** solutions
- **Expertise on demand** – OnPointSM Bio-discovery Services can assist you with **assay development**, **custom labeling** and **custom cell line development** as well as **integrated automation** solutions for your application

Innovation, combined with proven expertise and around-the-clock service, results in best-in-class solutions whatever the need. You can be confident that PerkinElmer specialists will help you find the most effective, and efficient, discovery strategy.



The EnVision® Multilabel Plate Reader, one of the many instrument platforms available from PerkinElmer.

Measurement	Intracellular Ca ²⁺		Intracellular cAMP		ERK phosphorylation	Reporter gene activity NFAT (Ca ²⁺ signaling) or CRE (cAMP signaling)	GTPγS binding		GPCR internalization	β-arrestin recruitment	Receptor ligand binding affinity and specificity	
Assay Type	Functional	Image-based single-cell readout	Functional		Functional	Functional	Functional		Functional, image-based readout: receptor endocytosis	Functional, image-based readout: clathrin-coated pit/vesicle formation	Biochemical	
PerkinElmer Technologies	Validated cell lines Luminescent Photoproteins: AequoScreen®/ AequoZen®/ PhotoScreen™ Fluorescence: calcium-optimized cells for use with fluorescent dyes	Calcium flux using fluorescent calcium sensors	LANCE® cAMP AlphaScreen® cAMP cAMPZen® FroZen™ cells	NEN® radioimmunoassay cAMP FlashPlate® Adenylyl Cyclase Activation FlashPlate	AlphaScreen SureFire® Phospho-ERK 1/2 AlphaScreen SureFire® Total ERK	britelite™ plus steadylite plus®	NEN Filter Binding Assay WGA FlashPlate Membrane preparations	DELFLIA® GTP-binding	GFP-tagged receptor	Clathrin-coated pit/vesicle formation using GFP-tagged β-arrestin	NEN Radionucleotides WGA FlashPlate Membrane preparations	DELFLIA ligands
Reader Requirements	Luminescence or Fluorescence reader with injectors	High Content Screening readers with injectors	TR-FRET-enabled reader	Radiometric detector	Alpha-enabled reader with laser	Luminescence reader	Radiometric detector	TRF-enabled reader	High Content Screening reader	High Content Screening reader	Radiometric detector	TRF-enabled reader
PerkinElmer Readers	LumiLux® Cellular Luminescence Platform EnVision® Multilabel Plate Reader with Injectors CellLux® Fluorescence Workstation VICTOR™ X Multilabel Plate Reader with Dispenser MicroBeta® JET Luminescence Counter	Opera™ HCS System with Dispenser Opera LX HCS System with Dispenser and UV Upgrade	ViewLux™ uHTS Imager EnVision Multilabel Plate Reader with TRF LASER or Alpha Reader VICTOR X4 or X5 Multilabel Plate Reader	MicroBeta Scintillation & Luminescence Counter TopCount Scintillation & Luminescence Counter Tri-Carb® Liquid Scintillation Analyzer	EnVision Multilabel Plate Reader with Alpha Option	EnVision Multilabel Plate Reader VICTOR X Multilabel Plate Reader MicroBeta Scintillation & Luminescence Counter TopCount® Scintillation & Luminescence Counter LumiLux Cellular Luminescence Platform	MicroBeta Scintillation & Luminescence Counter TopCount Scintillation & Luminescence Counter Tri-Carb Liquid Scintillation Analyzer	ViewLux uHTS Imager EnVision with TRF LASER VICTOR X4 or X5 Multilabel Plate Reader	Opera HCS System with Injector Opera LX HCS System with Injector	Opera HCS System with Injector Opera LX HCS System with Injector	MicroBeta Scintillation & Luminescence Counter TopCount Scintillation & Luminescence Counter Tri-Carb Liquid Scintillation Analyzer	ViewLux uHTS Imager EnVision Multilabel Plate Reader with TRF LASER VICTOR X4 or X5 Multilabel Plate Reader
Select PerkinElmer Microplates	OptiPlate™ CulturPlate™ ViewPlate®* ProxiPlate™	CellCarrier™ Plate ViewPlate*	AlphaPlate™ OptiPlate 1/2 AreaPlate ProxiPlate	FlashPlate OptiPlate	AlphaPlate OptiPlate 1/2 AreaPlate	OptiPlate CulturPlate ViewPlate	FlashPlate UniFilter® Plate	DELFLIA Yellow or Clear Plate AcroWell™ FilterPlate	CellCarrier Plate ViewPlate	CellCarrier Plate ViewPlate	FlashPlate UniFilter Plate	DELFLIA Yellow or Clear Plate

*PDL-coated ViewPlates available. For details, contact PerkinElmer today.