



Accelerate Your Research  
and Discovery.

Accomplish More.

# Choose from the **Most Complete** Range of Custom Reagent Services

Service Offering	Applications	Technologies	Page	
Reagent Services	Overview	Services Process	2	
Screening and Profiling	Overview	Services provided by Cerep	3	
Assay Development	GPCR Screening Assays	Calcium Flux	AequoScreen®	4
		cAMP	LANCE® cAMP or Radiometric Detection	5
		Receptor-Ligand Binding	Custom cell-line development	5
			Custom Ready-to-Screen frozen cells	5
			Custom receptor membrane preparations	5
			NEN® <sup>125</sup> I or <sup>131</sup> I Custom-Labeled Radioligands	5
	Kinase Screening Assays	Time-Resolved FRET	LANCE <i>Ultra</i>	6
		Pathway Analysis	AlphaScreen®	6
	ELISA Conversion	No-Wash ELISA	AlphaLISA®	7
		Time-Resolved Fluorescence	DELFI A®	7
Custom Labeling	Alpha Technology	AlphaScreen	8	
		AlphaLISA	8	
	Time-Resolved FRET	LANCE <i>Ultra</i>	8	
	Time-Resolved Fluorescence	DELFI A	8	
Microplate Services	Custom Microplate Coating	PerkinElmer Microplates	9	
	Custom Microplate	PerkinElmer Microplates	9	
Custom Radiosynthesis	Phase 1 ADME	NEN GMP-Compliant Synthesis and Analysis	10	
	Radiolabeled Biochemicals	NEN <sup>3</sup> H, <sup>14</sup> C, <sup>35</sup> S, <sup>33</sup> P	10	
	Tritium Labeling	NEN <sup>3</sup> H	10	
	Radiochemical Assays	Custom Radiochemical-based Assay Development	11	
	Binding Affinity Assays	Custom Filter Binding Assay Development	11	
	Radioidination	NEN <sup>125</sup> I or <sup>131</sup> I	11	
	Radionucleotide Hybridization	Custom Radionucleotide Synthesis	11	



*“A key part of OnPoint Reagent Services is the scientist-to-scientist interaction, from the start of a project to the successful completion of the project.”*

–Martina Bielefeld-Sevigny, Center of Excellence Leader,  
Discovery & Research Reagents, PerkinElmer

# We Develop, You Discover

Success depends on your most valuable resource: your scientists. But when they have to develop their own assays and reagents, they are able to devote less time to investigating and innovating. That's why we've developed OnPoint Reagent Services – the complete solution for accelerating and simplifying life science research and drug discovery.

## Discover with the Most Trusted, Flexible and Innovative Technologies

At PerkinElmer, we understand that no two projects are exactly the same. If you're researching a proprietary target or don't find what you need in our catalog, we can design a customized solution for you.

OnPoint scientists are experts in PerkinElmer's state-of-the-art assay and reagent technologies and detection instrumentation. They know our products and equipment inside and out and pride themselves in applying their technical achievements to help you reach your critical research goals.

The OnPoint team is able to recommend solutions from one of the industry's broadest portfolio of reliable and innovative technologies, the choice of many leading biotechnology and pharmaceutical companies worldwide.

OnPoint's range of reagent services include:

- Assay Development for GPCR, Kinase and ELISA Conversion Assays
- Custom Labeling Services
- Custom Microplate Barcoding and Coating
- Custom Radiosynthesis

Because we focus on your success and choose from such a wide range of assay technologies, we custom design the right solution for you – the one that meets your scientific requirements.

## Trust PerkinElmer for Radiochemical Competence and Safety

No other company has invested more time and resources into safe radiochemical development and technology transfer than PerkinElmer. We manufacture products under an ISO 9001:2000 registered quality system. PerkinElmer can also perform custom radiosynthesis under GMP guidelines.\*



\* Consistent with ICH Q7A, Good Manufacturing Practice Guidance for Active Pharmaceutical Ingredient, August, 2001, Section 19, API's for Use in Clinical Trials.

# Clear, Well-Defined Processes

## That Save Time and Reduce Cost

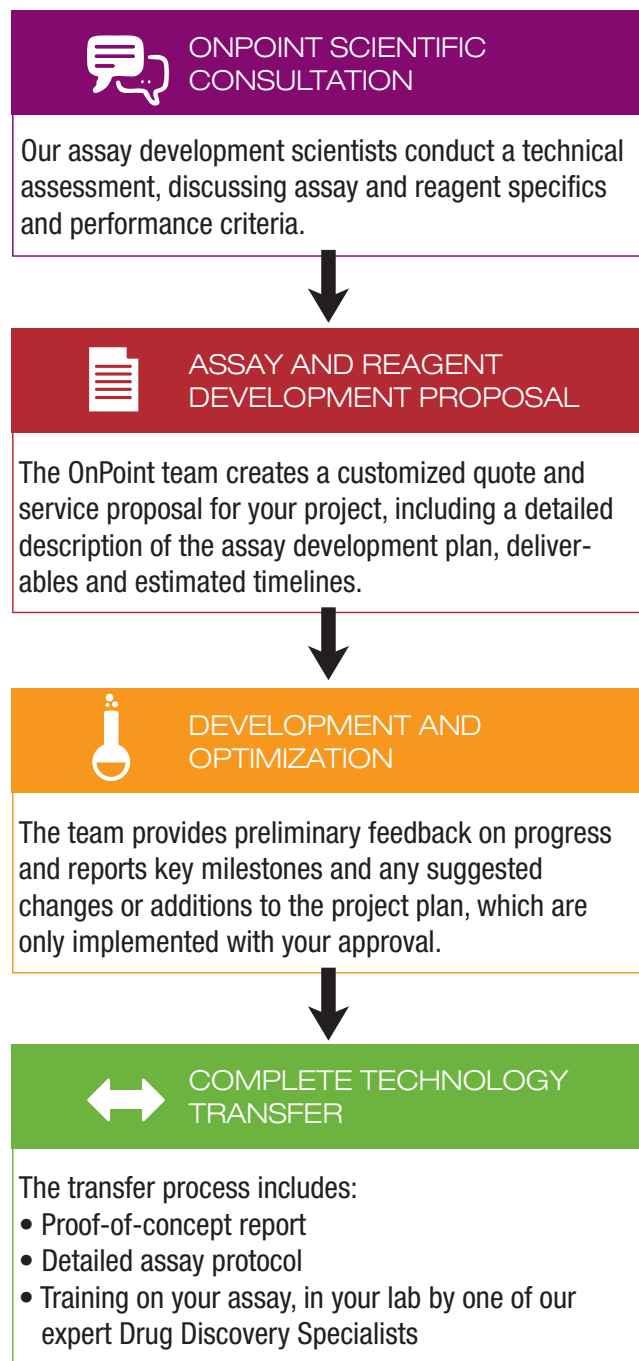
Whether you're considering a simple custom labeling or a full assay development project for research applications, OnPoint has established Standard Operating Procedures to ensure that you receive your custom reagents on time and within budget.

A custom labeling project typically involves you identifying the substrate you need labeled – whether it's a protein, peptide or antibody – and choosing the best PerkinElmer reagent technology for your application. If you're not sure, we can work with you to determine the best approach. When we receive your request, we will give you an estimate of the cost and timeframe for delivery of your custom labeled product, usually within 24 hours. Once you approve, we get right to work performing your custom labeling. When you receive your substrate, you can get started on your own assay development. Our microplate and custom synthesis services follow similar processes, with the goal of making sure you get what you expect, when you expect it.

For a full assay development project, our proven, standardized process helps you minimize risk and control costs: we invoice you at the end of each clearly-defined phase of the project, for that portion of the project only. And along with every custom assay development project, you benefit from the services of an expert, dedicated project manager. Throughout the project, you also receive support and assistance from your local PerkinElmer Drug Discovery Specialist, who performs the training for your assay in your lab, once the assay is optimized and the project is completed.

Regardless of the scale of your project, our goal is for you to receive what you need, when you need it. You can be assured that there are no surprises at delivery.

### The OnPoint Assay Development Process





### OnPoint Offers a Complete Solution

Through our global partner, Cerep, we can deliver an end-to-end solution, from a full high-throughput screen to selectivity profiles for the early anticipation of clinical effects. PerkinElmer can develop the assay according to your needs, and Cerep can perform the screening or profiling study.

Cerep's professionals possess the knowledge and training to execute your assay with PerkinElmer reagents and instruments accurately, quickly and cost-effectively.

Using our reagent and instrument platforms, Cerep can perform:

- High- or medium-throughput screening and profiling
- Toxicology and selectivity screening
- Radioligand binding assays
- Other screening and profiling services

When you need to extend your research and development team, choose OnPoint. We're dedicated to helping your scientists pursue their core mission: achieving breakthroughs in research and discovering the drugs of tomorrow.





# GPCR Screening

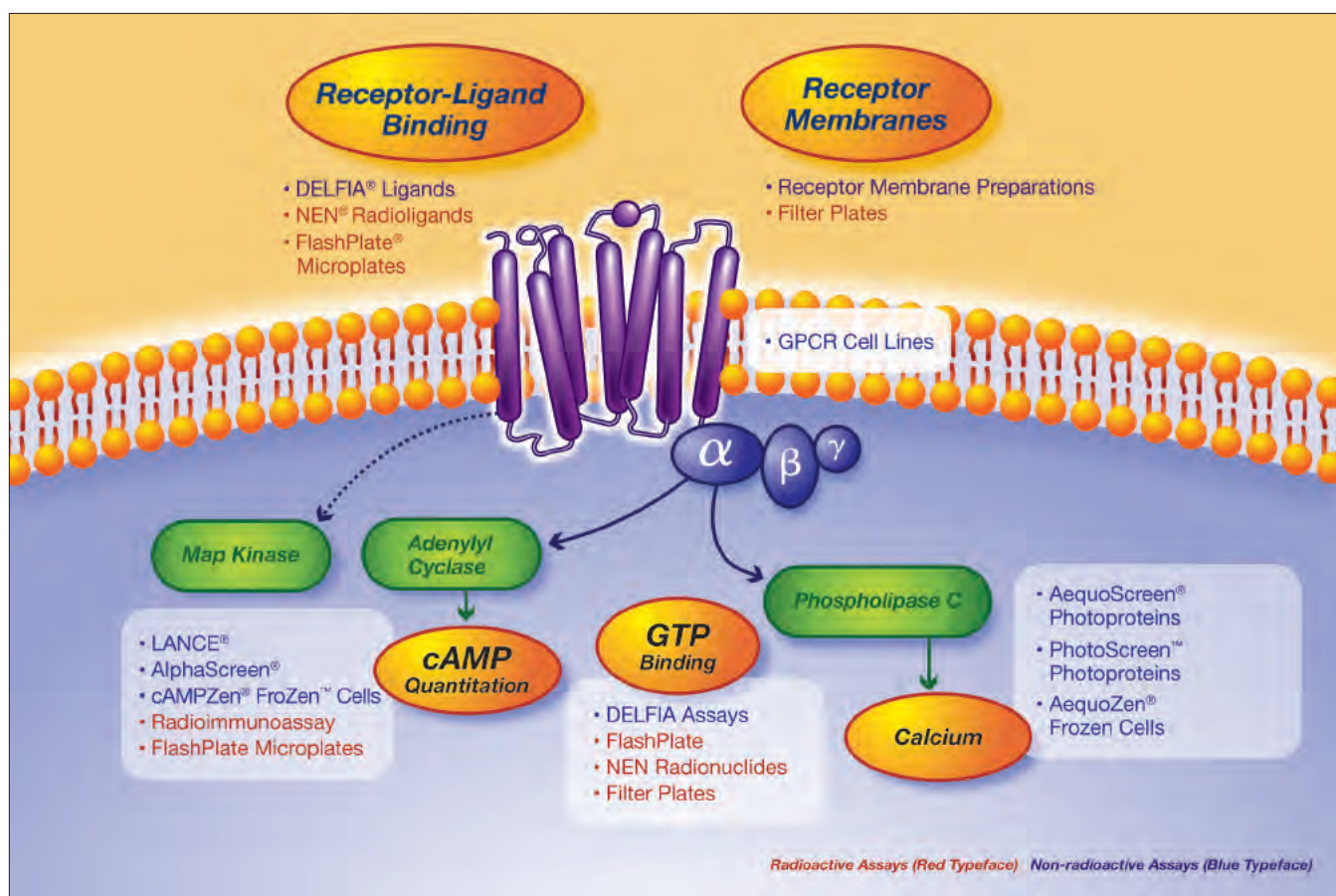
## Assay Development

Comprising over 30% of drug targets under investigation, GPCRs are a critical target class for high-throughput screens. Because cell-based assays are critical to many screening campaigns today, we've invested our time and resources into developing the highest-quality custom cell-line services for GPCR screening. We also offer the broadest range of assay development technologies available, from cell-based to TR-FRET.

### AequoScreen Calcium Flux Assays

If you need to develop assays measuring intracellular calcium levels, let us develop a custom assay for you. We can incorporate your chosen target into a photoprotein luminescent cell-line.

### Detection and Measurement of GPCR Activity



PerkinElmer has a wide range of solutions for the detection and measurement of GPCR activity. OnPoint Reagent Services can customize most of these technologies to meet your specific needs.

# Get Your GPCR Essentials Here

## cAMP Assays Utilizing LANCE cAMP or Radiometric Detection

PerkinElmer can develop a custom cAMP assay with our TR-FRET-based LANCE cAMP technology or with our NEN radiochemicals, depending on your instrumentation and material handling requirements.

## Custom Cell-Line Development

Rather than spending months developing and optimizing a receptor cell-line, let us do it for you. If you can't find your GPCR of interest within our ValiScreen™ cell-line offering, we will develop a cell-line you need so you can run your assays with confidence.

## Custom Ready-to-Screen Frozen Cells

If you prefer Ready-to-Screen cells, we can culture and freeze cells from any of our catalogue clones using an optimized protocol. We provide you with:

- Batch QC criteria (both on EC<sub>50</sub> and window)
- Validated cells that are ready to use for cAMP or calcium testing

Our frozen cells are optimized for PerkinElmer detection platforms, including EnVision®, VICTOR®X, MicroBeta® and CellLux®.

## Custom Receptor Membrane Preparations

We specialize in the production of large batches of adherent mammalian cell-lines expressing cell surface receptors and proteins of interest. Pilot scale production is available for testing, as is large-scale supply for screening assays. Our membranes are produced from cells which are grown according to our standard manufacturing procedures. We have extensive experience with many cell-lines including CHO-K1, HEK293, A9L, neuroblastomas and myelomas.

Our membrane preparations retain their receptor binding activity and are shipped as either cell pellets or membranes. We provide you with quality control data including pharmacological characterization and a protein assay, as well as a radioligand binding assay using either a commercially available or custom labeled radioligand.

## <sup>125</sup>I & <sup>131</sup>I Custom-Labeled Radioligands

From the company that pioneered development of the essential tools for receptor ligand binding, PerkinElmer offers over 400 NEN <sup>3</sup>H and <sup>125</sup>I ligands. If you don't find exactly what you need, we'll work with you, scientist-to-scientist, to prepare a custom radioligand that meets your specifications.

### You're Not Alone

Throughout the assay development process, our team works hand in hand with you, providing status updates, making decisions, and eventually providing hands on training and technology transfer in your lab. From initial inquiry through on-site implementation, the OnPoint team helps to ensure your assay development project stays on time and within budget.

# Kinase Screening Assay Development

## The Right Solution Has Never Been Easier

Cellular signal transduction and the measurement and detection of kinases are critical areas of study in the investigation of cancer and other major disease states. PerkinElmer offers both biochemical and cellular assay technologies for studying kinases. Our OnPoint scientists can develop a custom kinase assay utilizing one of our advanced technologies.

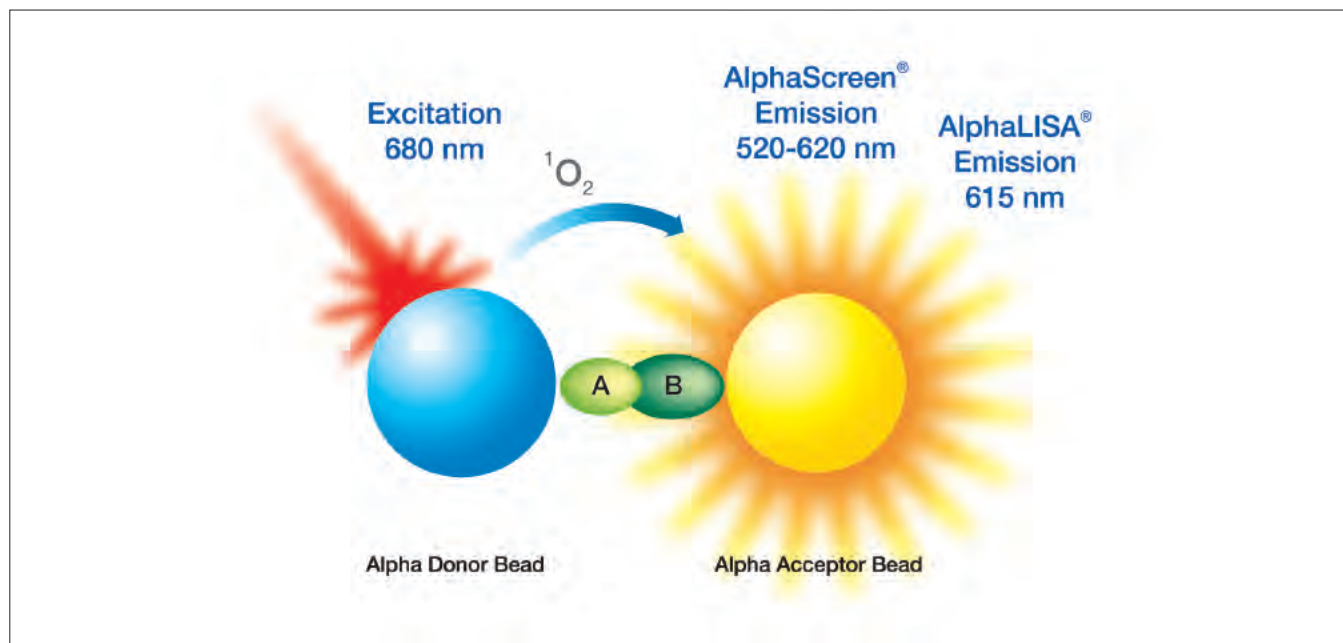
### Time Resolved FRET Assays: LANCE *Ultra*

LANCE *Ultra* is based on fluorescent technology that's been proven to deliver greatly accelerated sample throughput in a cost-effective manner. Using our innovative *ULight™* red-shifted dye, LANCE *Ultra* provides a simplified assay format with improved performance. We can easily label your substrate of interest using LANCE *Ultra*, and even provide an optimized assay ready for screening.

### Cellular Pathway Analysis: AlphaScreen and AlphaLISA

The AlphaScreen family of assays allows for cellular phosphoprotein analysis by immunosandwich capture of endogenous phosphorylated substrate in cell lysates. Tell us what you need, and we can develop a custom assay using one of our AlphaScreen technologies.

### AlphaScreen Technology





# ELISA Conversion Assay Development

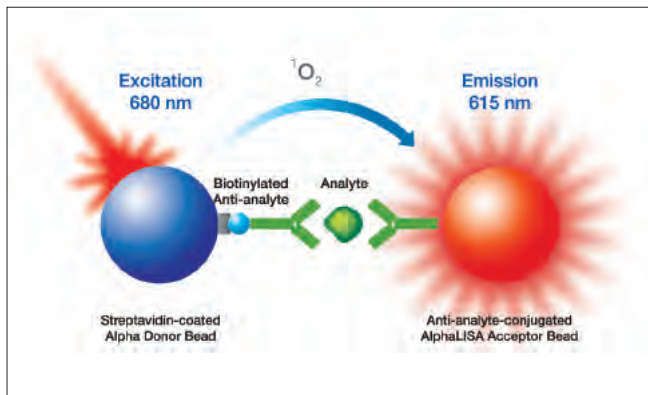
## Think Outside The Well

ELISA assays are a staple of biomarker discovery and detection. PerkinElmer offers the most exciting innovation in ELISA technology since the first colorimetric assay: AlphaLISA, a no-wash ELISA alternative. We also offer conversion of traditional ELISA assays using our TRF DELFIA technology.

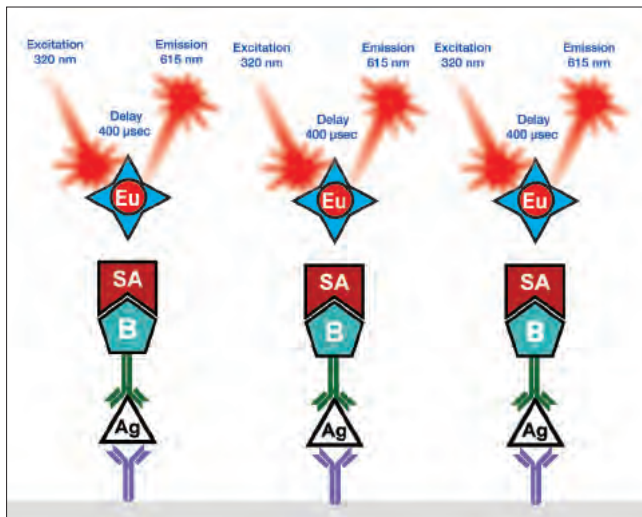
### Conversion of Conventional ELISA to No-Wash, Homogeneous AlphaLISA

AlphaLISA offers greater dynamic range and higher sensitivity than traditional ELISA, with increased signal and reduced sample requirements. Faster and more cost-efficient than ELISA, AlphaLISA results in higher throughput at lower costs. PerkinElmer can develop a custom AlphaLISA assay for you that is easy to miniaturize and automate.

### AlphaLISA Assay Principle



### DELFIA Assay Principle



### TRF Assay Development for ELISA: DELFIA

DELFIA is a proven, highly versatile microplate-based time-resolved fluorescence assay platform. The combination of high sensitivity, wide dynamic range and multiplexing capability makes DELFIA an excellent alternative to traditional ELISA methods, giving more flexibility to your assay and workflow. The broad dynamic range of DELFIA makes it ideal for samples in which the concentration of the analyte to be measured is unknown and sample composition necessitates wash steps.

# Custom Labeling Services

## Your Reagents Made To Order

Whatever the assay you have in mind, you need the right technologies for your target. We can custom label your peptide, antibody or protein substrate or nucleotide so you can develop the assay you need. If you prefer, we can even perform the assay development for you.

### Custom Labeling of Proteins and Peptides

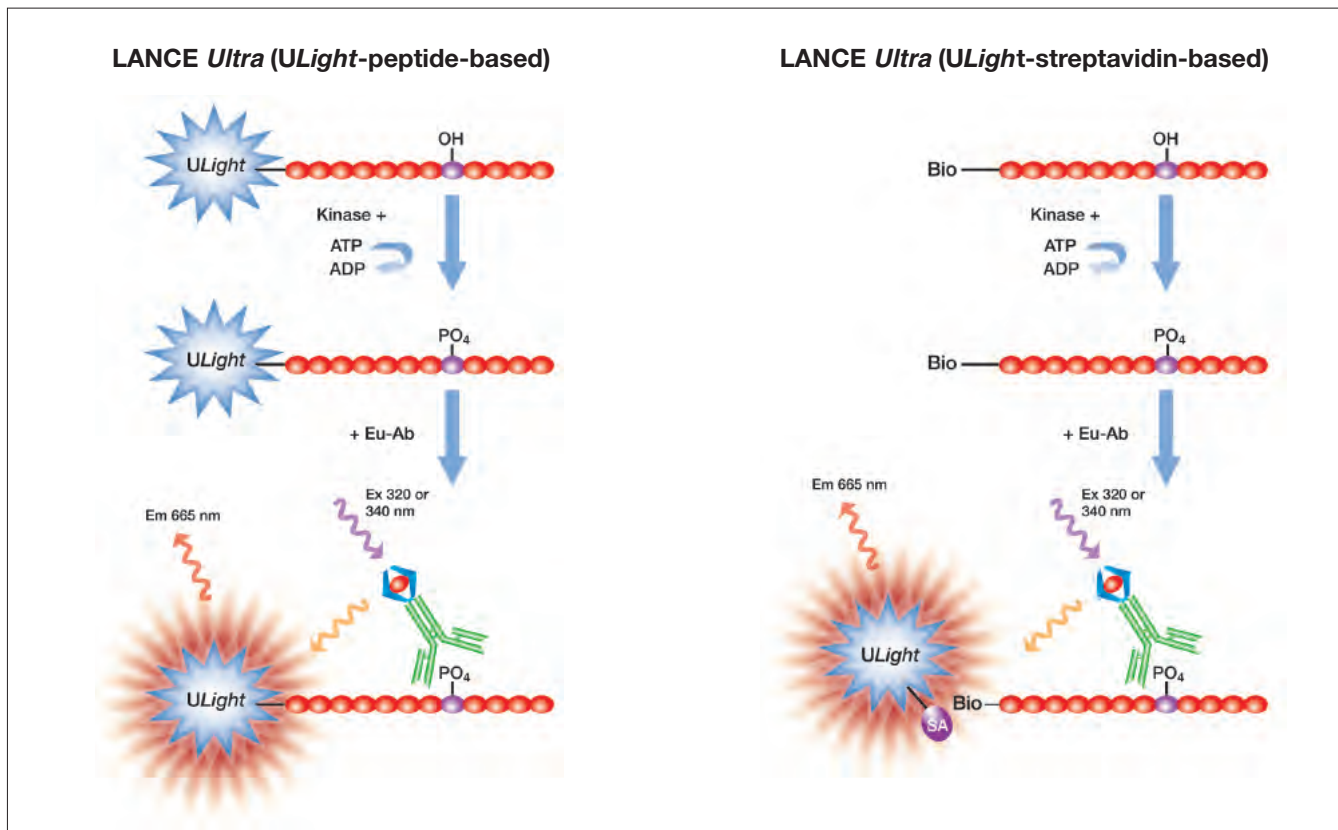
So you can develop your specific assay, your protein, antibody or peptide can be labeled for the following technologies:

- Alpha Technology
  - AlphaLISA
  - AlphaScreen
- TR-FRET: LANCE *Ultra*
- TRF: DELFIA

### Custom Fluorescence- and Hapten-Labeled Nucleotides

PerkinElmer offers one of the world's most extensive lines of fluorescent- and hapten-labeled nucleotides for applications such as differential gene expression analysis on microarrays, SNP analysis and *in situ* hybridization. We can accommodate the needs of your laboratory with larger package sizes, special buffers, analog concentrations and other custom modifications of our products.

### LANCE *Ultra* Assay Principles



# Microplate Services

## Better Microplates Mean Better Results

### Custom Microplate Coating for Research Applications

Our extensive experience with microplate coating technology allows us to be extremely flexible. For example, we can:

- Utilize your coating process and protocol to coat PerkinElmer microplates.
- Develop an application-specific coating process for you.
- Modify an existing plate-coating formulation to suit your needs.
- Deliver individually pouched or bulk-packaged microplates.

### Custom Microplate Barcoding

Our microplates can be supplied with a high-quality barcode label. Waterproof, scratchproof and DMSO-resistant, these plastic labels withstand freezing to -80 °C. We offer:

- Different label formats (10 x 65 mm or 6 x 65 mm)
- Various barcode types (128, 39, ITF, etc.)
- Labeling of any or all microplate sides
- Multiple labels per plate
- Custom sequences and custom information



PerkinElmer offers a complete line of high-quality microplates for nearly every research application. Innovations include the 1536-well AlphaPlate™, which improves AlphaLISA performance by reducing well-to-well crosstalk up to 17 times versus standard white plates.

# Custom Radiosynthesis

## What You Want, When You Want It

PerkinElmer's experienced chemists will work with you, scientist to scientist, to design and prepare your radiochemical. During the specification process and after delivery, you'll have access to PerkinElmer's extensive technical support resources to ensure your custom product meets your specifications and applications.

### ISO Registered

We develop and manufacture custom products under an ISO 9001:2000 registered quality system, ensuring consistent quality and reliable traceability.

### GMP Capabilities

To assure compliance and to help meet aggressive deadlines, PerkinElmer's laboratories offer GMP\* synthesis and analysis appropriate for Phase 1 clinical studies and have participated in the evolution of this important service for the pharmaceutical industry.

When customers develop drugs for human use, the FDA requires that the following ADME studies be conducted as Phase 1 investigations prior to more extensive clinical trials:

- Absorption
- Distribution
- Metabolism
- Excretion

### Custom $^3\text{H}$ , $^{14}\text{C}$ , $^{35}\text{S}$ , $^{33}\text{P}$ Synthesis

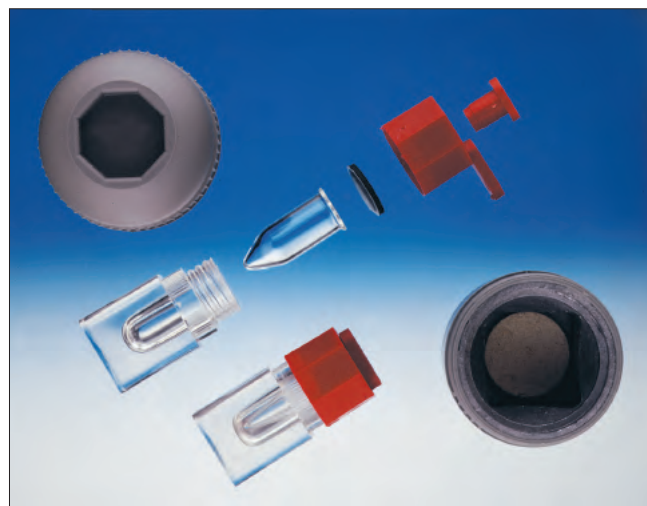
Our custom synthesis scientists are experts in dealing with the technically challenging synthesis of radiolabeled biochemicals, such as peptides, steroids, sulfonamides, lipids, and others. They often collaborate with chemists from our analytical laboratory to ensure the successful purification and analysis of final products.

### Tritium Labeling

Our tritium labeling service is a cost-effective way to prepare a  $^3\text{H}$ -labeled radiochemical. The process includes:

- Reaction of the precursor you submit, according to the labeling method you select
- Removal of the catalyst and labile tritium from the resulting crude product
- Assay of the resulting crude product for total radioactivity

### Safety and Convenience



With the revolutionary NENSure™ packaging system, PerkinElmer established new safety and convenience standards for the shipment of radiochemicals.

\* Consistent ICH Q7A, Good Manufacturing Practice Guidance for Active Pharmaceutical Ingredients, August, 2001, Section 19, API's for Use in Clinical Trials.

## Custom Radiochemical-based Assays

PerkinElmer's decades of experience with radiochemicals can help in developing your radiochemical-based assay. You can count on the quality and safety of our products and processes.

## Custom Binding Assay Development

If you're studying binding affinity, we can help develop a custom filter binding assay using our standard or custom-labeled radioligands, either with nitrocellulose filters or our Glass Fiber Filter UniFilter® plates. Depending on your desired readout, we can also help develop a binding assay using our exclusive 96- or 384-well FlashPlate® microplate technology or a Scintillation Proximity Assay (SPA) with our high quality membranes.

## Radioiodination

We will label your compound with  $^{125}\text{I}$  or  $^{131}\text{I}$  using the most appropriate radioiodination method and reagent quantities to meet your specifications. We can also perform large-scale iodinations (>10 mCi).

## Radionucleotide Synthesis

PerkinElmer can synthesize and package radiolabeled mono-, di- and triphosphate nucleotides, oligonucleotides and other related biochemicals to your specifications on a made-to-order basis. We have extensive experience in labeling nucleotides in different positions (e.g., beta position) and synthesizing labeled oligos for hybridization.



## Radiochemical Technical Data

PerkinElmer's quality control program includes the preparation of lot specific Technical Data sheets which typically contain the following information:

- Initial radiochemical purity
- Chemical purity (where applicable)
- Structural formula with label position
- Method of synthesis (with pertinent references)
- Recommended storage conditions
- Approximate rate of decomposition under these conditions
- Information for purification after prolonged storage



# Find Out What OnPoint Can Do for You Today

When you work with us, you'll realize benefits like these:

- Fast, reliable, cost-effective custom labeling, assay and cell-line development
- More efficient use of your scientists' time and expertise
- Scientist-to-scientist interaction
- The industry's widest range of trusted and innovative screening reagent technologies
- Clear and well-defined processes that help to minimize your risk while advancing your research
- Experienced expert handling of radiochemicals and other hazardous liquids
- Technology transfer and training on your assay, in your lab.

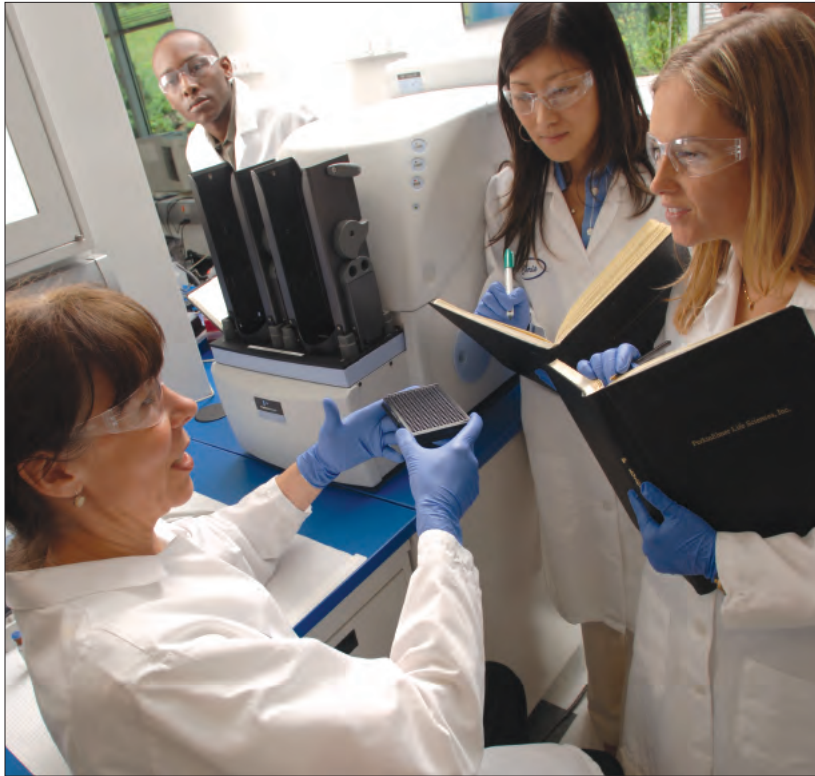
And as you would expect, all projects, assays and reagents are royalty-free and held in the strictest confidence.



In addition to Reagent Services, PerkinElmer also offers OnPoint Automation Integration Solutions, in which we can develop integrated liquid handling, automation, and detection platforms specific to your needs. We'd like to learn about your scientific challenges and talk with you about how OnPoint can increase your productivity and help you achieve the results you need faster.

For more information, please contact your local PerkinElmer representative or visit [www.perkinelmer.com/onpoint](http://www.perkinelmer.com/onpoint).

**OnPoint**<sup>SM</sup>  
integration solutions



*“One of our customers had to analyze 15,000 samples that were coming in every day using ELISA. ELISA is a wash assay and it was technically not possible for him to accomplish the work. By developing for him an AlphaLISA assay with a very wide dynamic range, and which is homogeneous, without wash steps, we solved his problem.”*

–Martina Bielefeld-Sevigny, Center of Excellence Leader,  
Discovery & Research Reagents, PerkinElmer

More information about OnPoint services is available  
at [www.perkinelmer.com/onpoint](http://www.perkinelmer.com/onpoint)

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



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For a complete listing of our global offices, visit [www.perkinelmer.com/lasoffices](http://www.perkinelmer.com/lasoffices)

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