



# PI3-KINASE HTRF<sup>®</sup> ASSAY

## PI3-Kinase Inhibitor Screening Reagents

### COMPLETE PI3-KINASE ASSAY SOLUTION

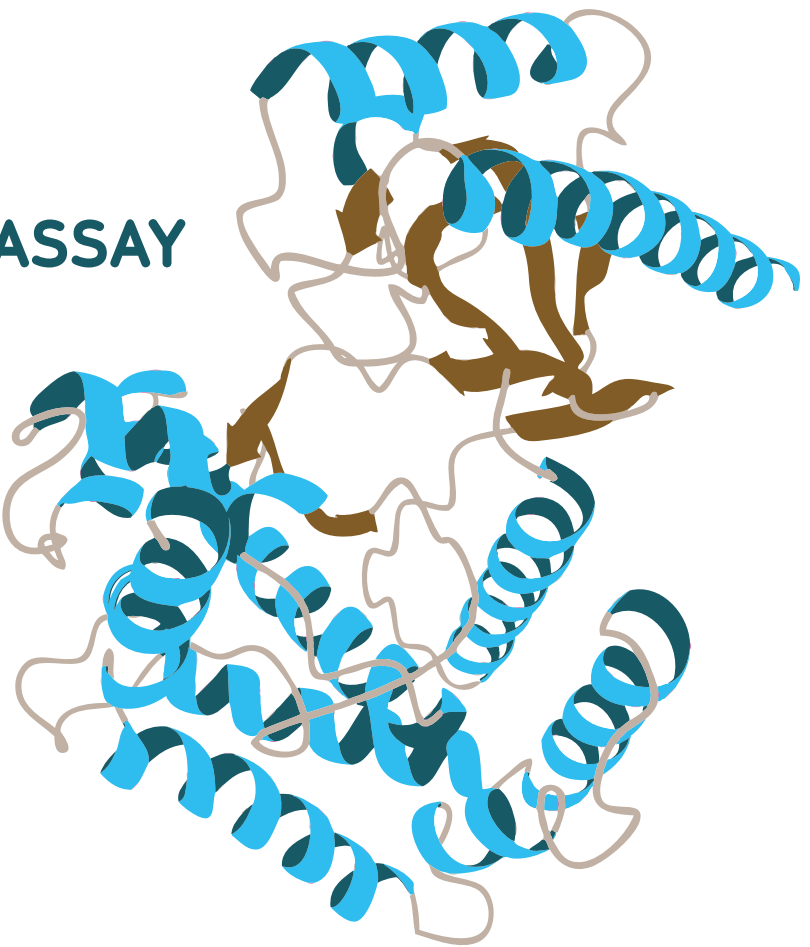
The PI3-Kinase HTRF Assay is a high-performance assay kit that provides a universal method for assaying all Class I PI3-Kinases in a homogeneous 384 well format. Nowhere else will you find a kit that offers this level of performance. And, nowhere else you will find as many Class I PI3-Kinases available.

### PI3-Kinase HTRF Assay Highlights

- Large Stokes shift and time-resolved elements of technology help to reduce compound interference, minimizing concern of false negatives.
- Picomole sensitivity of the HTRF assay platform enables the integrity of enzyme kinetics to be retained, ensuring the most physiologically relevant assay parameters.
- Compatible with all Class I PI3-Kinase isoforms, enabling relative data comparisons and eliminating the need for multiple assay types.
- Reliable, proven assay—based on the technology used in the Millipore, Upstate<sup>®</sup> KinaseProfiler<sup>™</sup> Service.
- $Z'$  factor routinely exceeds 0.8, ensuring consistent, reliable data.

**Millipore voted, "Most preferred outsourced profiling supplier and the most trusted fee-for-service supplier to provide rapid turnaround and reliable results."**

— *Kinase Screening & Profiling Trends, HTStec Limited, 2008*



Imagine an assay kit that overcomes the barriers of limited throughput, compound interference and lackluster performance. Discover why more and more research scientists are turning to the PI3-Kinase HTRF Assay—  
**Available Only From Millipore!**

ADVANCING LIFE SCIENCE TOGETHER<sup>™</sup>  
Research. Development. Production.

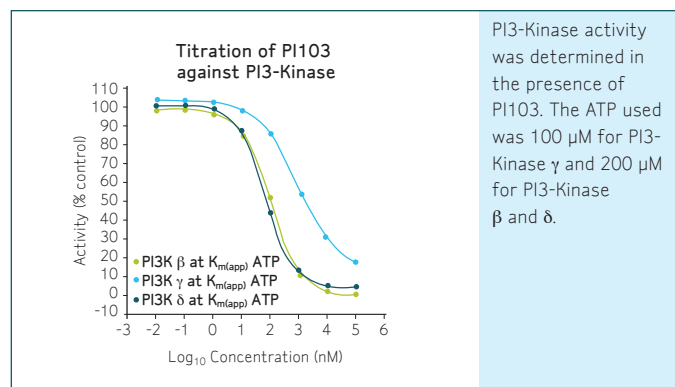
**upstate**

THE EXPERTISE OF UPSTATE<sup>®</sup>  
IS NOW A PART OF MILLIPORE

## HOW DOES IT WORK?

This industry-leading assay makes use of the specific, high affinity binding of the GRP1 pleckstrin homology (PH) domain to PIP<sub>3</sub>, the product of a Class 1A or 1B PI3-Kinase acting on its physiological substrate PIP<sub>2</sub>. During the detection phase of the assay, a complex is generated between the GST-tagged PH domain and biotinylated short chain PIP<sub>3</sub>. The biotinylated PIP<sub>3</sub> and the GST-tagged PH domain recruit fluorophores (Streptavidin-Allophycocyanin and Europium-labeled anti-GST respectively) to form the fluorescence resonance energy transfer (FRET) architecture, generating a stable time-resolved FRET signal. The FRET complex can be disrupted in a competitive manner by non-biotinylated PIP<sub>3</sub>, a product formed in the PI3-Kinase assay. And because the assay has been configured into a robust homogeneous format utilizing homogenous time-resolved fluorescence (HTRF) technology, the integrity of enzyme kinetics are preserved, ensuring the most relevant assay parameters.

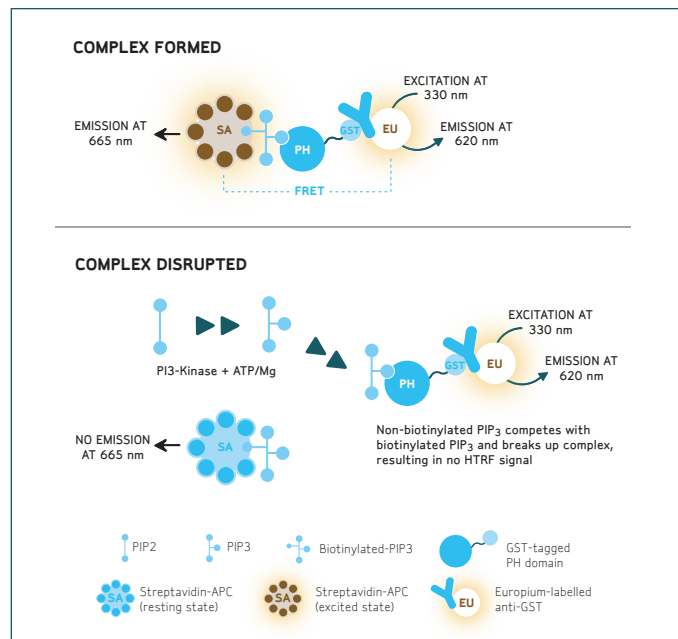
Use it as a kit to screen for potential PI3-Kinase inhibitors, or optimize further for use as a stand-alone module to test compounds for their ability to inhibit the binding of PIP<sub>3</sub> to the PH domain. It all adds up to ultra high throughput, increased reliability and robust performance so critical in helping you research PI3-Kinases and their possible link to diseases such as cancer.



At Millipore, we're constantly expanding our collection of new kinases to bring you the complete cell signaling solution. For more information contact your local Millipore Drug Discovery Specialist. Visit [www.millipore.com/drugdiscovery](http://www.millipore.com/drugdiscovery) for more information on other kinase services and ways Millipore supports Life Science research.



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## ORDERING INFORMATION

The PI3-Kinase HTRF Assay is available in large quantities and convenient package sizes.

Description	Catalogue No.
PI3-Kinase HTRF Assay (384 assay points)	33-016
PI3-Kinase HTRF Assay (5 x 384 assay points)	33-017

16 PI3-Kinases—validated for the PI3-Kinase HTRF Assay

### PI3-Kinase α and Disease-linked Mutants

Description	Species	Catalogue No.
PI3-Kinase (p110α/p65α)	Human	14-790
PI3-Kinase (p110α/p85α)	Human	14-602
PI3-Kinase (p110α(E542K)/p85α)	Human	14-782
PI3-Kinase (p110α(E545K)/p85α)	Human	14-783
PI3-Kinase (p110α(H1047R)/p85α)	Human	14-792
PI3-Kinase (p110α/p65α)*	Mouse	14-786
PI3-Kinase (p110α/p85α)*	Mouse	14-785
PI3-Kinase (p110α(E542K)/p85α)*	Mouse	14-791
PI3-Kinase (p110α(E545K)/p85α)*	Mouse	14-781
PI3-Kinase (p110α(H1047R)/p85α)*	Mouse	14-787

### PI3-Kinase β

PI3-Kinase (p110β/p85α)*	Human	14-603
PI3-Kinase (p110β/p85α)*	Mouse	14-794
PI3-Kinase (p110β/p85β)*	Mouse	14-788

### PI3-Kinase γ

PI3-Kinase (p120γ)*	Human	14-558
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### PI3-Kinase δ

PI3-Kinase (p110δ/p85α)*	Human	14-604
PI3-Kinase (p110δ/p85α)*	Mouse	14-789

\*KinaseProfiler Service Available

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