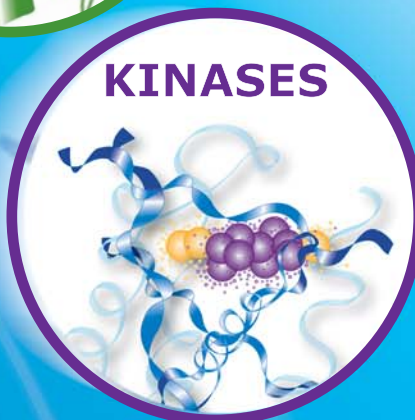
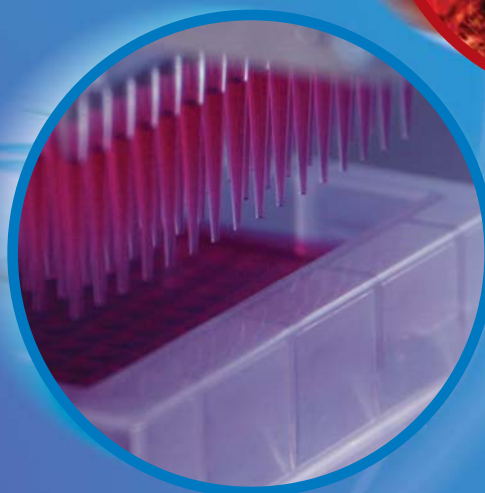


Simple Solutions for Complex Biology



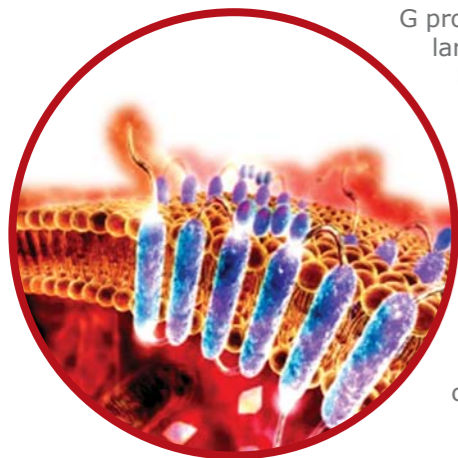
DiscoverRx commercializes **over 450** proprietary GPCR, Kinases, Nuclear Hormone Receptors and Protease assays to leading pharmaceutical and biotech laboratories for their primary, secondary screening as well as SAR and lead optimization efforts.

Visit us at www.discoverx.com for a full listing of our products or call us to discuss your custom assay development, profiling and screening needs.



GPCR

Largest Portfolio of non-force coupled cell lines for functional GPCR screening

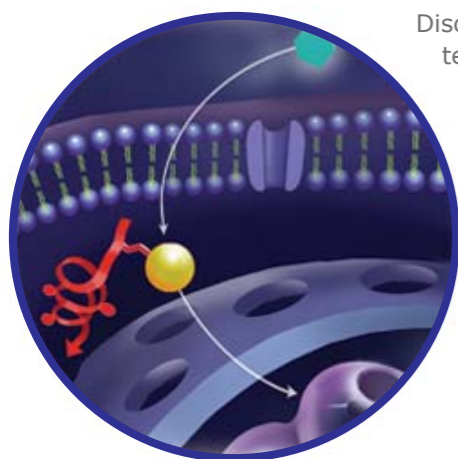


G protein-coupled receptors (GPCRs) are popular drug targets, accounting for a large fraction of drug discovery efforts. The exciting area of understanding ligand bias, GPCR heterodimerization, receptor internalization as well as development and non-small molecule GPCR drugs, is truly nascent and hence the potential of identifying novel drugs with advanced capabilities is vast. DiscoverX continues to innovate in this field by providing access to next generation GPCR screening platforms. Today, researchers can have access to > 400 functional non-force coupled known and orphan Human, Mouse and Rat GPCR targets as validated cell lines. The availability of the same target in multiple pathway read-outs such as second messenger, β -Arrestin recruitment and GPCR internalization allows for a more thorough and complete understanding of receptor biology. Finally, the release of a complete orphan GPCR panel, has revolutionized the industry and made a formerly intractable class of receptors open to novel compound discovery.

PathHunter™ β-Arrestin	<ul style="list-style-type: none"> Common screening platform for any GPCR regardless of its coupling status Broadest portfolio of orphans, human, mouse and rat GPCR targets
Second Messenger Assays	<ul style="list-style-type: none"> HitHunter™ cAMP: Chemiluminescent cAMP detection with large assay windows and excellent scalability Calcium Assays: High quality Calcium No Wash and Coelenterazine <i>h</i> reagents Over 85 non-force coupled Gs, Gi, Gq cell lines optimized for functional second messenger response
Internalization	<ul style="list-style-type: none"> Measure receptor internalization and trafficking using chemiluminescent detection Understand effect of key compounds on receptor recycling and kinetics
Dimerization	<ul style="list-style-type: none"> Study the interactions between different pairs of GPCRs or GPCR heterodimers Screen for compounds that enhance or disrupt heterodimerization

Pathway Assay

Simple Chemiluminescent Assays for Identifying Pathway Inhibitors

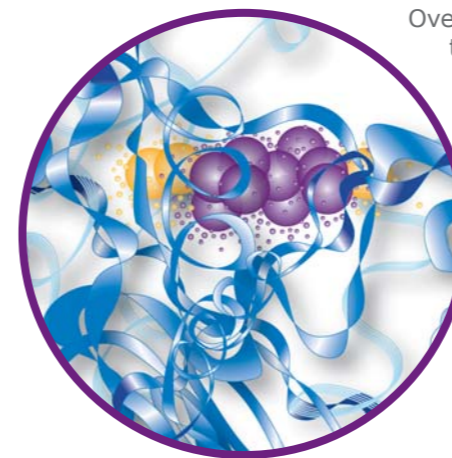


DiscoverX β -galactosidase based Enzyme Fragment Complementation (EFC) technology allows for developing cell based assays that very easily interrogate the fate of a signaling molecule upon activation. Single-step, no wash, chemiluminescent, cell-based assays are ideal for high throughput screening of key pathway inhibitors. Screen for pathway inhibitors by measuring IL-10 degradation, PCSK9 secretion and FOXO translocation. Vectors, parental cell lines and reagents to develop your own assay for protein translocation, degradation, secretion make assay development and screening easier than ever.

- **One-Step, No Wash Chemiluminescent Assays**
- **Ideal for Small Molecule and/or siRNA Inhibitors**
- **Imaging Free Assays for Protein Secretion, Translocation and Degradation**

Kinase

Unique portfolio to discover novel kinase therapeutics

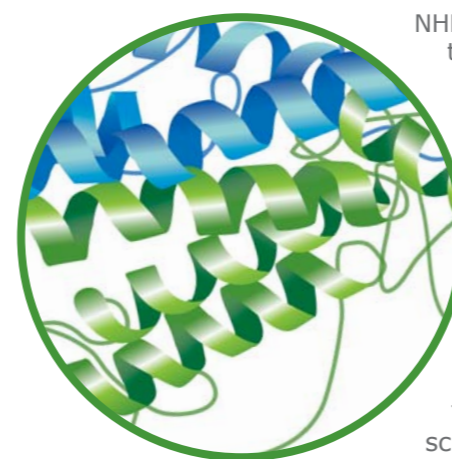


Over the past decade, a number of programs for the identification and characterization of protein kinase inhibitors have been implemented and majority of them use purified active enzymes and aim to identify ATP pocket inhibitors. Though these assay technologies are highly robust and HTS friendly, the ability to identify compounds that are non-ATP pocket binders and target the kinase of interest in a true biological context remains questionable. DiscoverX offers a choice of assays for activity based kinases, inactive kinase as well cell based kinases. All of our assays are one-step, gain of signal formats that expedite identification of novel class of kinase inhibitors including both small molecule as well as antibody therapeutics. Simplicity of protocol aid in assay development of novel kinases as well as inhibitor profiling of your advanced lead series.

	Purified Active Kinase	Inactive Kinase	Receptor Tyrosine Kinase	Cytosolic Tyrosine Kinase	Lipid Kinase	Serine Threonine Kinase
ADP Quest™	x		x	x		x
ADP Hunter™	x		x	x	x	x
HitHunter™ in-vitro Kinases		x				x
PathHunter™ Cell-Based Kinases			x	x		x

Nuclear Hormone Receptor (NHR)

Screen NHRs without Time Consuming Reporter Gene Assays



NHRs represent a promising class of clinically and commercially validated gene targets that are implicated in a wide range of metabolic and cardiovascular disorders. Perhaps the most widely used assays to study NHR biology are transcriptional reporter gene assays such as luciferase, β -lactamase and GFP. However the inherent disadvantages of these systems such as high false positives, long assay times and in some cases need for expensive imaging systems have necessitated the launch of new assays for screening this important drug target class. DiscoverX offers 2 types of NHR assays **1) PathHunter™ NHR_{TRANS}** that measure ligand mediated nuclear translocation of the receptor and **2) PathHunter NHR_{PRO}** that are based on detection of protein-protein interactions between an activated, full length NHR protein and a nuclear fusion protein containing Steroid Receptor Co-activator Peptide (SRCP) domains. Simple chemiluminescent detection coupled to a 3 hour functional assay readout make them ideal for screening and profiling.

- **Use full-length Nuclear Hormone Receptors**
- **No Requirement for Transcriptional Activity**
- **Reduced Assay Time (6 hrs) Relative to Reporter Genes (24 hrs)**

DiscoverX Products and Service Offering

DiscoverX offers its award-winning and proprietary EFC technology and associated products as fully configured ready-to-go assays, outsourced service offering and also as tool box which allows you to configure an assay of your choice!

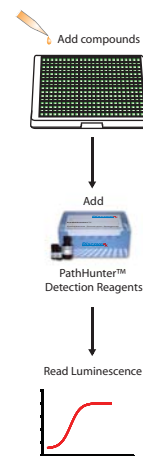
PathHunter™ and HitHunter® Screening Assays

Functional Cell-Based and Biochemical Assays for all major drug target classes

DiscoverX offers HTS friendly assays for over 400 drug targets including GPCR, NHR, Kinase and Proteases. All assays are 1-2 step assays that are compatible with standard automation and chemiluminescent detection platforms. Chemiluminescent detection provides higher sensitivity, excellent assay windows and virtually no interference from auto-fluorescent compounds. Assays are compatible with 96 well to 3456 well formats and are easily scalable.

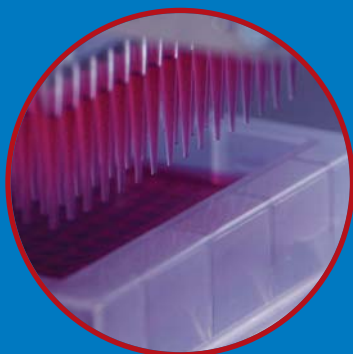
For a complete listing, visit www.discoverx.com

Need an assay for your specific target, send an email to CAD@discoverx.com for a confidential discussion on a custom assay development.



Profiling & Screening Services

Information That Drives Decision Making



Unlike traditional receptor binding or antibody based screening formats, DiscoverX Profiling and Screening services include functional cell-based assays for target classes such as GPCR, NHR and RTK targets.

1. Outsource Screening for upto 100,000 compounds
2. Run deorphanization campaigns against over 90 GPCR orphans
3. Interrogate late stage compounds against full panels that include over 350 cell-based assays for GPCR, RTK and NHR targets
4. Over 10 therapeutic panels including inflammation, cardiovascular, metabolic and cancer available

Email profiling@discoverx.com for a confidential discussion with our Profiling Experts!

Assay-Ready Products

Hassle-free cell-based assays anytime, anywhere!

Assay Ready kits (eXpress™ and EasyScreen™) contain everything you need to perform assay development, profiling, novel compound discovery, compound dosing, biomarker quantitation and receptor biology studies. All you need is plate reader and you can get results in few hours!

1. Over 350 kits available for human, mouse, rat GPCR for assay development compound profiling and dosing
2. Measure bioavailability of compounds or biomarker levels in serum samples
3. Single addition chemiluminescent detection assays



To learn more, please visit www.discoverx.com/gpcrs/assay-ready