A detailed 3D molecular model of a cell membrane. The membrane is depicted as a phospholipid bilayer with a brownish-orange head group layer and a yellowish tail group layer. Various proteins and receptors are embedded in the membrane, shown in shades of blue, purple, and orange. Some proteins are large and complex, while others are smaller and more globular. The background is a dark blue gradient.

# THE KEYS TO UNLOCK DISCOVERY

GPCR Cell Lines and Membrane Preparations

# Paving the Way for Meaningful Solutions in Your Research

Life science researchers are always working toward the next breakthrough discovery. For scientists working on GPCRs, speed is everything. And when it comes to drug discovery, overcoming the challenge of decreasing assay development time and accelerating your research, is necessary for success.

You don't have to face this obstacle alone. We're here, delivering a comprehensive collection of more than:

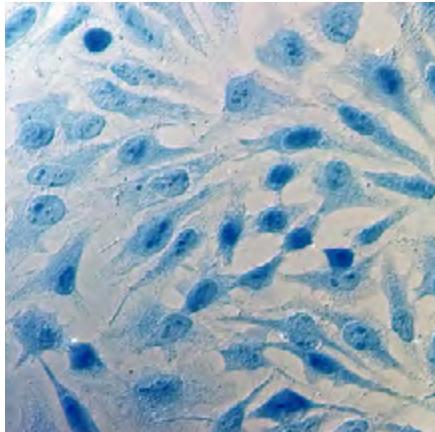
- 400 stable cell lines for binding and functional testing
- 150 frozen ready-to-use cells
- 100 membrane preparations

**COME EXPLORE ONE OF THE LARGEST GPCR CELL LINES PORTFOLIO.**

# Work Faster. Work Better.

Decreasing assay development time while increasing the quality of your results is a lofty goal, but necessary for research labs like yours to keep up with the competition.

So, we've made the nearly impossible totally probable with our validated, stable GPCR cell lines for calcium, binding, and functional testing – because when you eliminate the guess work, you can focus on the science.



Choose from stable GPCR cell lines expressing the most studied targets, including:

- Adenosines
- Adrenoceptors
- Cannabinoids
- Chemokines
- Dopamines
- Galanins
- Histamines
- Opioids
- Muscarinics
- Serotonins

[For more information on stable cell lines, click here.](#) ►

## OUR STABLY TRANSFECTED CELL LINE PORTFOLIO

**ValiScreen®** cell line family consists of transfected GPCR cell lines

**AequoScreen®** cell line family comprises double-transfected GPCR aequorin cell lines for convenient calcium signaling measurement

**PhotoScreen®** cell line family features double-transfected GPCR Photina® cell lines for convenient calcium signaling measurement

# Ready Whenever You Are

Take the stress out of functional testing with our frozen, validated, ready-to-use cells. These growth-arrested cells express a variety of GPCRs for binding and functional assays.

By using frozen cells, the cell prep work is done for you, eliminating the lengthy process of cell culture from your functional testing.

Our consistent, flexible, and convenient frozen cells enable you to quickly and cost effectively perform selectivity studies and cellular GPCR tests on multiple receptors at a time – for streamlined screening, lead optimization, and profiling.



Choose from stable GPCR cell lines expressing the most studied targets, including:

- Adrenergic
- Anaphylatoxin
- Chemokine
- Histamine
- Melanocortin
- Muscarinic

[For more information on frozen cells, click here.](#) ►

## OUR STABLY TRANSFECTED CELL LINE PORTFOLIO

**cAMPZEN™** frozen cell family consists of transfected GPCR cell lines

**AequoZen™** frozen cell family comprises double-transfected GPCR aequorin cell lines for convenient calcium signaling measurement

# Membrane Preparations Made Simple

Our membrane target systems offer a selection of products to help you identify and characterize ligands that bind to your receptor of interest. These membranes are quality assured and prepared from cells that express recombinant or endogenous GPCRs. Each lot of frozen membranes has been QC tested to determine receptor density and affinity.

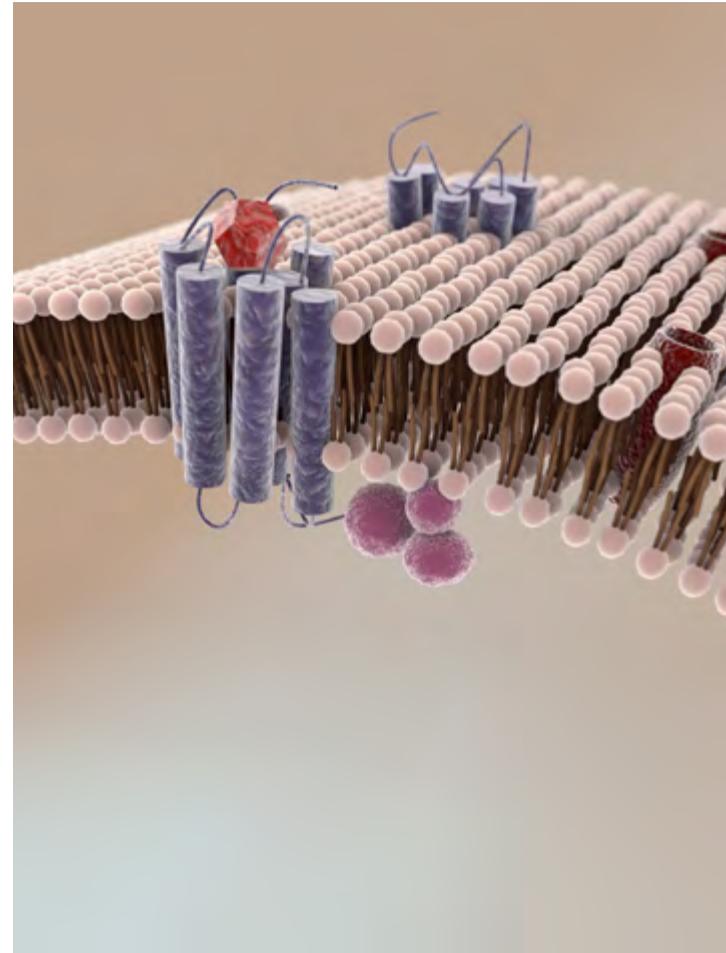
Our membrane preparations are derived from stable cell lines expressing ion channel, transporter, tyrosine kinase, and several GPCRs. They're also qualified for either ligand binding or GTPyS functional studies.

Well characterized and representing a wide range of pharmacologically important targets, our GPCR membrane preparations can be used for competitive radioligand binding assays as well as studies involving our HTRF® and DELFIA® technologies.

Choose from GPCR membrane preparations expressing the most studied targets, including:

- Adenosine
- Adrenergic
- Cannabinoid
- Dopamine
- GABA
- Melanocortin
- Muscarinic
- Opioid
- Serotonin

[For more information on membrane preparations, click here.](#) ►



# The Preferred Ligand Binding Technology

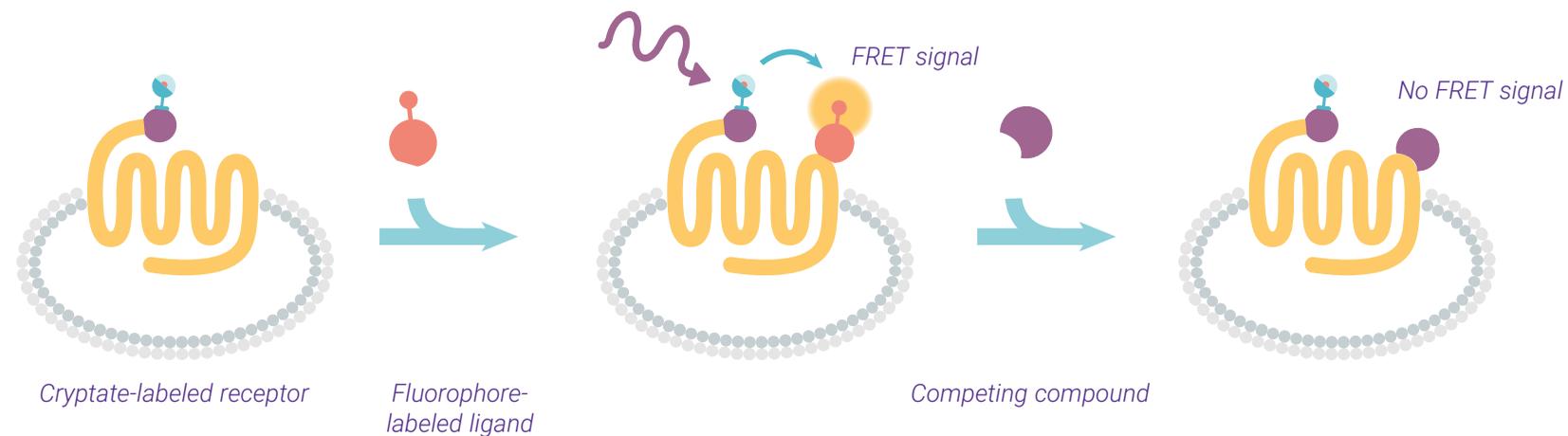
Our Tag-lite® solution is quickly becoming the industry standard for studying receptor-ligand binding interactions.

A non-radioactive, cell-based technology, it enables the investigation of natural ligands, small molecules, or antibodies binding to cell surface receptors. It's especially advantageous for GPCR and RTK investigations, biotherapeutic antibody development, and the study of ligand kinetics.

It offers straightforward add-and-read protocols that help you characterize the binding properties of compounds, regardless of their chemical structures or pharmacological properties.

Benefits of Tag-lite cellular binding assays:

- Nonradioactive
- Homogeneous and filtration-free
- Ready-to-use kits, frozen cells, and reagents available
- Does not alter the receptor pharmacology
- Peer reviewed and validated
- Thorough kinetic studies with true  $K_d$  values,  $K_i$ , association ( $K_{on}$ ), and dissociation ( $K_{off}$ ) rate constants



# The GPCR Portfolio That Leaves Nothing Out

With drug discovery focused on GPCR targets, the need for reliable, proven, and versatile assays, reagents, and instrumentation has never been greater. Understanding complex signaling mechanisms with speed and accuracy can mean the difference between success and failure.

We recognize the significant challenges scientists like you face every day to identify biologically and pharmacologically relevant pathways. Our extensive experience in both cellular and biochemical platforms enables us to guide and support your work every step of the way, from quickly optimizing your research to customizing solutions for specific target research.

We've developed the widest selection of proven GPCR target solutions – beyond the ligand GPCR event to the actual assessment of the cellular-activated signal transduction cascade – empowering you to identify, validate, screen, and profile your leads.

**It's time to get more from your research.**

## OUR GPCR PRODUCT PORTFOLIO

Reporter gene assays  
for fast, simple,  
cost-effective screening

NEN™ Radioligands that  
offer both tritiated and  
iodinated ligands

HTRF® cAMP assays  
for highly sensitive  
screening

AlphaLISA® SureFire® Ultra™  
and HTRF® detection assays for  
cellular-phosphorylation of ERK

IP-One HTRF and  
AlphaLISA detection  
kits for specific for  
Gq-coupled activation

[For more information visit www.perkinelmer.com/category/gpcr-research](http://www.perkinelmer.com/category/gpcr-research)

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