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High Throughput Screening

NEN[®] Adenylyl Cyclase Activation FlashPlate[®] Assay

Valid Functional Data at the Primary Screening Stage—
Quickly and Simply!

This patented technology from PerkinElmer Life Sciences permits direct measurement of receptor-mediated adenylyl cyclase activation/inhibition. The simple protocol is a fully homogeneous cellular assay which measures a true second messenger response (cAMP), for faster qualification of lead compounds than is possible with conventional primary screens. The assay is easily automated, straightforward to miniaturize, and fully compatible for HTS.

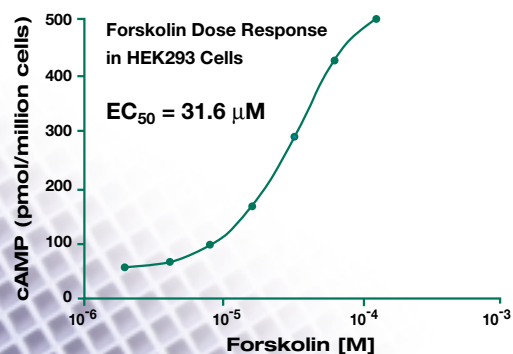
Valid Functional Screen for GPCR Targets at the Primary Screening Stage

Broad utility	Generic functional screen for Gi and Gs coupled receptor targets.
Direct	Directly measures cAMP production in whole cells.
Selective	Discriminates between agonists and antagonists at the primary screen stage.
Reproducible	Total assay CV is typically 5% – better than the industry standard.
Sensitive	0.2 pmole/well detection.
Validated	IC ₅₀ and EC ₅₀ proven comparable to conventional methods.

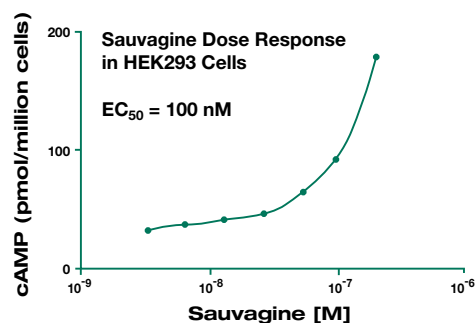
Increase Productivity and Speed up the Drug Discovery Cycle!

Simple & fast	Eliminates steps: <ul style="list-style-type: none"> • No sample transfers • No cAMP extraction • Homogeneous: no washes, no aspiration, no separation • No need to grow cells in microplates • Validated on commonly used cell lines
Reduced follow-up	More relevant information at the primary screening stage.
Same day results	Short incubation time (2 hours).
Maximum productivity	Available in 384-well format.
Expert support	Dedicated PerkinElmer Life Sciences Technical and Applications Scientists.

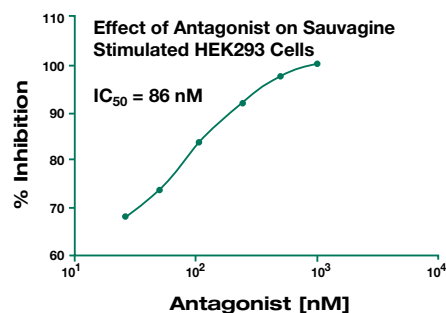
Stimulation of Forskolin in HEK293 cells



Receptor-mediated activation and inhibition of Adenylyl Cyclase using HEK293 cells



Ligand Stimulation



Antagonist Inhibition

Kit Components

Adenylyl Cyclase Activation FlashPlate Microplates	Detection Buffer (liquid)
cAMP [¹²⁵ I] Tracer	cAMP standard (lyophilized)
Stimulation Buffer (liquid)	TopSeal™-A Plate covers

Product Packaging, Shipping and Storage

SMP004	2 plate kit (96-well)	SMP701	2 plate kit (384-well)
SMP004A	5 plate kit (96-well)	SMP701A	5 plate kit (384-well)
SMP004B,C	40 plate kit (96-well)	SMP701B,C	40 plate kit (384-well)

Shipped at ambient temperature. Store at 2-8°C upon receipt.

Other FlashPlate Products from PerkinElmer Life Sciences

Complete Assay Kits

SMP001	cAMP
SMP002	cGMP
SMP003	PGE ₂

Basic FlashPlate

SMP200	Basic 96-well
SMP400	Basic 384-well

Coated FlashPlate PLUS

SMP101	Sheep anti-Rabbit	SMP108	Phospholipid
SMP102	Protein A	SMP109	Glutathione
SMP103	Streptavidin	SMP410	Streptavidin 384-well
SMP104	Goat anti-Mouse	SMP411	WGA 384-well
SMP105	WGA	SMP412	Nickel 384-well
SMP106	Myelin Basic Protein	SMP413	Glutathione 384-well
SMP107	Nickel Chelate		



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