

DIANA CK1 Panel

Inhibitor Profiling Service

DIANA Technology

DIANA is patented solid-phase competitive binding assay that uniquely combines small molecule-based DIANA probes with the strengths of ELISA and qPCR.

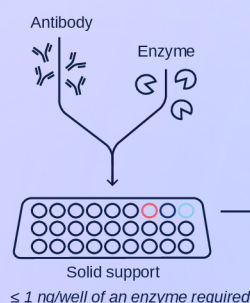
Quantitative Results

Determination of quantitative potency data (Kd) from each measurement thanks to the proprietary DIANA technology.

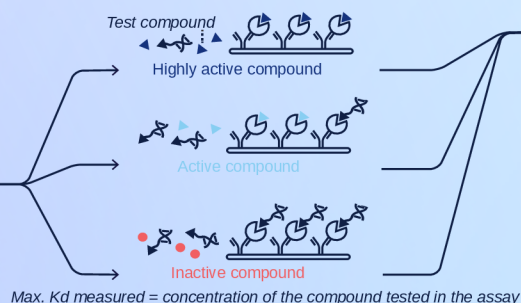
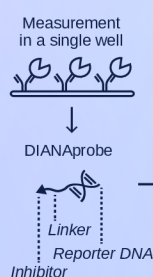
Affordable Excellence

Our service has fast turnaround time and it is possible to fully customize the order. Finally, the pricing makes our top-tier solution accessible to everyone.

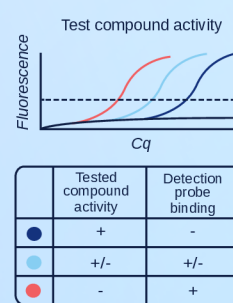
Solid phase binding



Probe + inhibitor competition/binding



qPCR readout



DIANA Features



Quantitative data

Provide true binding constants (Kd) from each measurement



Robustness

All DIANA assays are compatible with 10% DMSO



Zero interferences

PCR read-out ensures minimal chance of compound interference



Internal quality control

Binding potency of known inhibitor is determined for each kinase



Scalability

DIANA assay can be readily translated into HTS format

DIANA CK1 Panel introduction

Casein kinase 1 (CK1) is a family of serine/threonine kinases involved in critical cellular processes such as signal transduction, DNA repair, cell division and apoptosis. Dysregulation of CK1 kinases is linked to diseases including cancer and neurodegeneration.¹

Assay List

CK1α

CK1αL

CK1γ1

CK1γ2

CK1γ3

CK1δ

CK1ε

With overlapping yet distinct functions, CK1 isoforms require **highly selective inhibitors** for precise therapeutic targeting. **Selectivity profiling** is essential to uncover isoform-specific roles and to minimize off-target effects.²

DIANA CK1 Panel offers a streamlined, seven-enzyme assay using **full-length CK1 proteins** - preserving native domain architecture for more comprehensive inhibitor profiling. Covering all major CK1 isoforms, our panel **accelerates data-driven development of next-generation CK1-targeted therapies**.

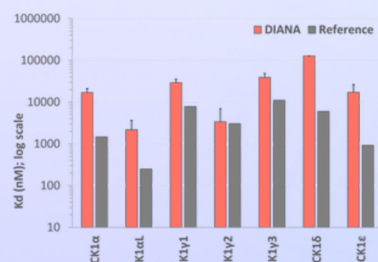
1. Fulcher et al.: Functions and regulation of the serine/threonine protein kinase CK1 family: moving beyond promiscuity. *Biochem. J.* (2020)
2. Long et al.: Targeting casein kinase 1 for cancer therapy: current strategies and future perspectives. *Front. Oncol.* (2023)

Example Data Sets

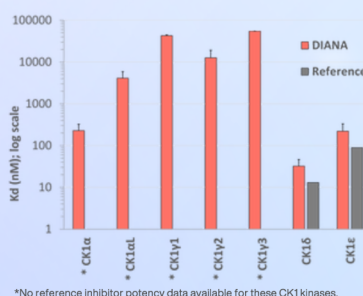
The inhibition profiles of **Staurosporine**, well-studied non-specific kinase inhibitor, and **PF-670462**, known CK1δ and CK1ε specific inhibitor, are shown and compared with available public data. Additionally, the consistency of inhibition binding potencies calculated from different test compound concentration for CK1δ is shown. Lastly, inhibition selectivity profiles of **CTX-0294885**, **PF-670462**, and **D4476** determined by DIANA CK1 panel is provided.

Comparative Analysis of Inhibition Selectivity Profile of Staurosporine and PF-670462 with Reference

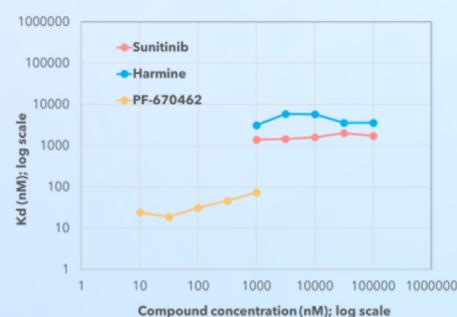
Staurosporine



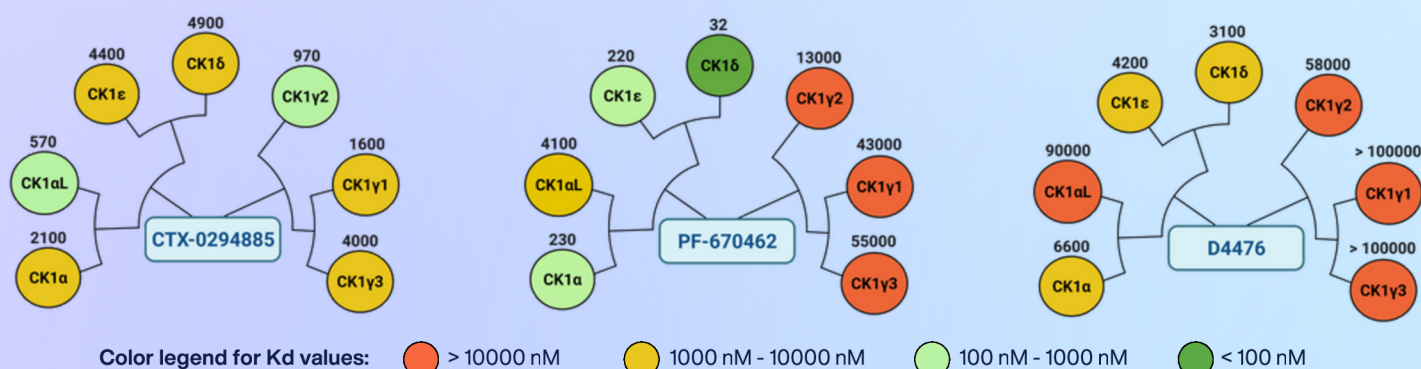
PF-670462



Kd calculation on CK1 δ from different inhibitor concentrations



Data from selectivity profiling of three kinase inhibitors by the DIANA CK1 panel



Service Information

	No. kinases	Cpds	Price (EUR)	Turnaround time [#]	Result
CK1 Panel	7	1	140*	7 business days	Kd
Custom Selection	1	1	25*	7 business days	Kd

*Minimal Order Quantity for Custom Selection service is 500 EUR

[#]Counts from the day compounds are delivered to our testing facility. For complex orders the turnaround time can be extended to 14 business days.

Expand your CK1 profiling into whole-kinome coverage with DIANA Kinase Panel



Over 170 kinase assays covering whole kinome

