

# **DIANA CDK 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**

of quantitative Determination potency data (K<sub>D</sub>) 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.





≤ 1 ng/well of an enzyme required





Max.  $K_{p}$  measured = concentration of the compound tested in the assay

### **DIANA** Features



#### Quantitative data

Provide true binding constants  $(K_{D})$ 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

From cell cycle control (CDK1/4/6) to transcription (CDK7/9/12), CDKs underpin diverse physiological roles-and their inhibitors hold immense clinical promise. Yet even minor cross-reactivity with unintended CDKs can sabotage drug safety and efficacy. The DIANA CDK Panel solves this with a comprehensive 24-kinase assay, combining patented DIANA probe technology and qPCR precision to quantify binding affinities across the entire CDK family.

Turn kinase profiling from a bottleneck into a strategic advantage, ensuring your lead compounds are as specific as they are potent.

	Assay List	
CDK1/cycB1	CDK7/cycH1	CDK5/p25
CDK2/cycA2	CDK7/cycH1/MNATI	CDK5/p35
CDK3/cycE1	CDK8/cycC	CDK14/cycY
CDK4/cycD1	CDK9/cycTl	CDK16/cycY
CDK4/cycD2	CDK9/cycT2	CDK17/cycY
CDK4/cycD3	CDK10/cycQ	CDK18/cycY
CDK6/cycD1	CDK11A	CDK19/cycC
CDK6/cycD3	CDK12/cycK	
	CDK13/cycK	
Cell cycle CDKs	Transcriptional CDKs	Atypical CDKs

#### qPCR readout





# **Example Data**

The inhibition profiles of three known kinase inhibitors (Staurosporin, Ribociclib, and OTS-964) are shown and compared with publicly available data from reference method. Additionally, inhibition profile of two more inhibitors is shown and the calculation of the inhibitors' binding potency from various inhibitor concentration for CDK3/cycE1 is provided.

### Comparative Analysis of Inhibition Profile of 3 Known CDK Inhibitors with Reference







#### Inhibition profile of specific and non-specific CDK inhibitors



### K<sub>D</sub> calculation on CDK3/E1 from different inhibitor





### **Service Information**

	No. kinases	Cpds	Price (EUR)	Turnaround time <sup>#</sup>	Result
CDK Panel	24	1	500	7 business days	K <sub>D</sub>
Custom Selection	1	1	25*	7 business days	K <sub>D</sub>

\*Minimal Order Quantity for Custom Selection service is 500 EUR

<sup>#</sup>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 CDK profiling into whole-kinome coverage with DIANA Kinase Panel



Over 170 kinase assays covering whole kinome





DIANA Biotechnologies is a Czech biotech company that develops advanced tools for research and development. Powered by a team of top scientists in molecular biology, chemistry, pharmacology, and automation, we provide R&D services and products for academic labs, biotech companies, and pharmaceutical partners. Our offerings include the development of monoclonal antibodies and drug discovery services.

