TARGET-SPECIFIC ASSAY SERVICES

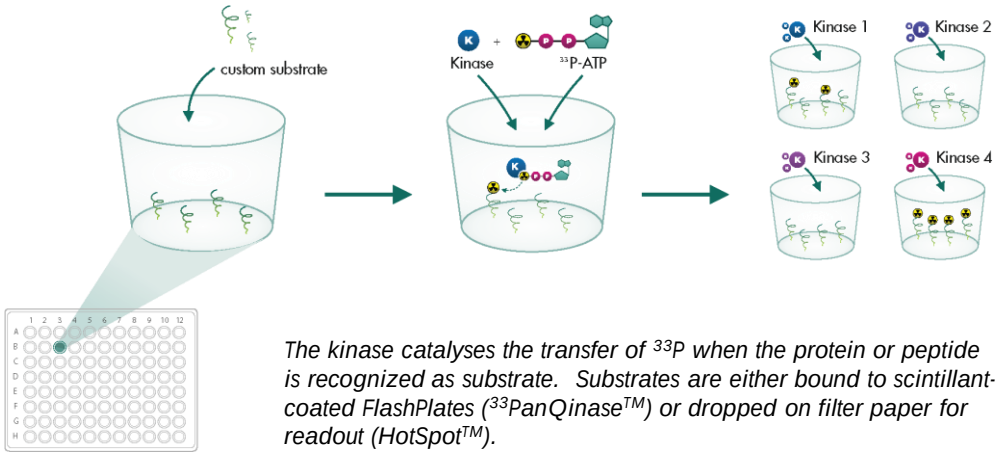
➢ Purpose of the KinaseFinder Service

The KinaseFinder Service is intended to identify protein kinases, which accept a given test sample (protein or biotinylated peptide) as a substrate.

Type of KinaseFinder	Number of protein kinases	Assay Format
Tyr protein kinases	94	^{33}PanQinase™
Ser/Thr protein kinases	245	^{33}PanQinase™
Tyr and Ser/Thr protein kinases	339	^{33}PanQinase™
Wild Type Kinase Panel	376	HotSpot™
Custom panel	Selected by customer	HotSpot™

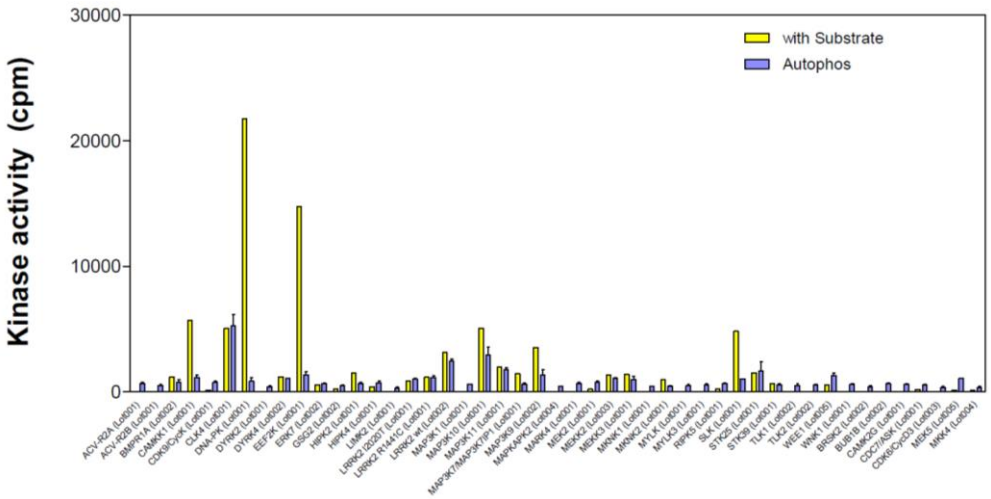
➢ Assay principle

The target substrate is incubated with different kinases in every well of a multi-well plate together with ^{33}P-ATP that serves as phospate donor.



The kinase catalyses the transfer of ^{33}P when the protein or peptide is recognized as substrate. Substrates are either bound to scintillant-coated FlashPlates (^{33}PanQinase™) or dropped on filter paper for readout (HotSpot™).

➢ Example Data



Example data with 50 Ser/Thr kinases. Activity of kinases with example substrate protein are shown (corrected for substrate background activity). Substrate protein was tested at one concentration. Yellow: Kinase with substrate protein; blue: Kinase without substrate protein (autophosphorylation). A ratio value between substrate phosphorylation and apparent autophosphorylation > 3 may be considered as significant. Performed with ^{33}PanQinase™ assay. cpm = counts per minute