

➤ Available cellular phosphorylation assays to screen your compounds

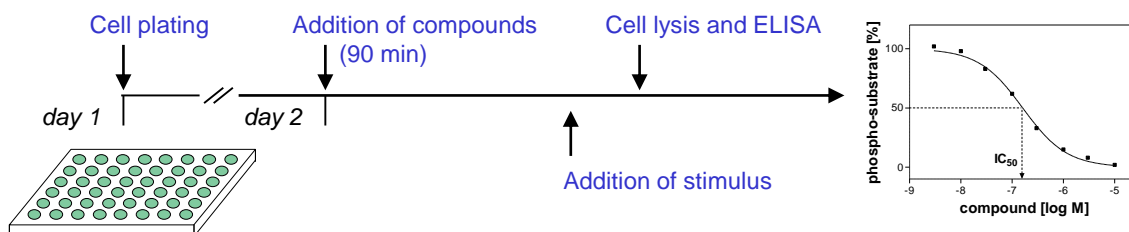
We are kinase experts and believe that especially in the field of rationale drug development of small molecule kinase inhibitors, a compound ranking based on cellular data is pivotal for the decision on further preclinical testing. After *in vitro* kinase profiling of your compounds a similar experimental setting based on cellular phosphorylation assays will substantially increase your knowledge on which one of your inhibitors are still blocking the kinase in the cellular context. In addition, cell-based test systems offer the advantage of physiological ATP concentrations at the site of action and the phosphorylation of physiological substrates.

Generally, cells are preincubated with test compounds to allow thorough target binding. In case of receptor tyrosine kinases we determine the autophosphorylation level, for serine/threonine kinases we have developed assays that allow the quantification of phospho-levels of the immediate downstream substrate. Please check for your kinase of interest.

➤ Cellular phosphorylation assays complement your rational drug development

The cellular phosphorylation assay service is currently established for 49 kinases (see [List of Kinases for Cellular Phosphorylation Assays](#))

➤ You ship your compounds – ProQinase performs the testing



- IC₅₀ values are determined by testing 8 compound concentrations in semi-logarithmic steps (each concentration in duplicates).
- Quality assurance is provided by calculation of Z' factors for Low/High controls on each assay plate and by including a full IC₅₀ curve for a reference inhibitor to monitor adequate dose/response relation in your assay run.