

# Solubility



## Fast, Accurate and Affordable...

Whether you're tight on budget, time, or internal capacity Analiza offers a solubility assay to meet your needs. We use only miniaturized, gold-standard shake-flask assays with quantitation by LC-MS, HPLC-UV or chemiluminescent nitrogen detection (CLND) to measure both kinetic (from DMSO stock solutions) and thermodynamic (from dry powder) solubility.

For early screening we've applied the equimolar detection capabilities of CLND. Eliminating the need for compound specific calibration, we're able to provide accurate, shake-flask solubility measurements with just 10  $\mu\text{L}$  of DMSO stock solution. This method is best suited for rank ordering compounds, predicting solubility for *in vitro* biology experiments and whenever sample is at a premium.

When your solubility assay demands high sensitivity (sub-micromolar-nanomolar) or absolute integrity we employ our state of the art, Ultra-High Accuracy QTOF-MS for analysis. With sub 2ppm mass accuracy, the QTOF-MS provides absolute identification of the test article and when operated in full scan auto ms-ms mode also allows for the identification of impurities and degradation products.

As compounds progress through the discovery cycle and more rigorous thermodynamic solubility measurements are needed we offer the same miniaturized shake-flask method with quantitation by LC-MS or HPLC-UV.

Let us leverage our experience with hundreds of thousands of compounds to design a screening strategy that is right for you. If you already have a program in place but don't have available internal resources to keep up we can assay your samples under a method transfer agreement.

Add XRPD analysis to confirm crystalline form to avoid ambiguous thermodynamic solubility data.

## Assay Protocol

### Method

Miniaturized Shake Flask

### Compound Requirements

Kinetic: 10  $\mu\text{L}$  (CLND), 20  $\mu\text{L}$  (HPLC-UV or LC-MS) of 10mM DMSO stock solution

Thermodynamic: 0.5 mg of dry powder

### Dose Concentration

Kinetic: 200  $\mu\text{M}$  (others available)

Thermodynamic: 2 mg/mL (others available)

### Incubation Time

24 hours (others available)

### Assay Media

SGF, pH 1.2

SIF, pH 6.5

PBS, pH 7.4

Other media available

### LOQ

1  $\mu\text{M}$  (CLND and HPLC-UV)

0.001  $\mu\text{M}$  (LC-MS)

### Quantitation Method

CLND

HPLC-UV

LC-MS

### Data Delivery within 72 hours

Solubility ( $\mu\text{M}$  and  $\mu\text{g}/\text{mL}$ )

### Cost

CLND: \$25.00 per compound per media

HPLC-UV: \$125.00 per compound, \$25.00 each additional media or repeat

HPLC-MS: \$150.00 per compound, \$50.00 each additional media or repeat



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