

In Vitro ADME Services

Customized ADME studies to predict the disposition of your drug candidates within the body and select suitable drug compounds with desirable DMPK properties.

Triggered by the high demand to quickly introduce new drugs to the market in a cost-effective manner, determining the absorption, distribution, metabolism and excretion (ADME) properties of compounds early in the drug discovery process has become increasingly important. These kinetic studies, together with screening for drug toxicity, help to establish a pharmacological profile of the drug.

Offering a comprehensive list of assays from early discovery to definite regulatory designs and supported by our bioanalytical service department for method development and validation, our *in vitro* ADME services are available for small and large molecule drugs, and can be tailored to fit the specific requirements of your program.

In Vitro ADME Services

▶ Physicochemical properties

- a) Stability in PBS or biological fluids (blood, plasma or cerebrospinal fluid)
- c) Lipophilicity (Log P, Log D and pKa)

▶ Permeability and transporters

- a) PAMPA (GIT, BBB or skin)
- c) ABC/SLC transporters

▶ Distribution

- a) Plasma protein binding (equilibrium dialysis)
- c) Brain tissue binding

▶ Metabolism

- a) Metabolic stability (hepatocytes, microsomes, S9)
- c) CYP induction
- e) CYP reaction phenotyping

- b) Aqueous solubility (thermodynamic and kinetic method)

- b) Caco-2/MDCKII, MDCKII-MDR1 permeability

- b) Matrixes protein binding
- d) Blood cell partitioning

- b) CYP inhibition
- d) UGT Inhibition
- f) Time dependent inhibition

Benefits of Using Our Services

● A full range of ADME services:

From permeability, drug absorption and transportation to drug metabolism, our services fully support your comprehensive ADME testing needs.

● Consistent with regulatory guidelines:

Study designs are continually updated to align with current guidance of regulatory agencies.

● Skilled researchers:

Our scientists are experts in the fields of drug absorption, transportation, and metabolism. We'll work with you to make informed decisions.

● Excellent quality:

You can rely on our team for accurate, reproducible data and regulatory submission-ready reports.

● Customization:

Whether modifying our standard protocols or adapting the protocols of our clients, we have the expertise required to provide customized solutions to meet your specific needs.