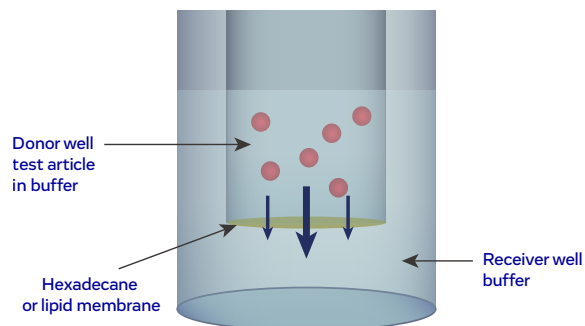


# In Vitro Permeability

Membrane permeability plays an important role in determining oral bioavailability. Cyprotex has extensive experience in the delivery of high quality *in vitro* permeability data to support early ADME screening and to direct design-make-test-analyse (DMTA) cycles. High-throughput liquid and acoustic handling automation is combined with a proprietary laboratory information management system (LIMS) and the latest in liquid chromatography mass spectrometry (LC-MS/MS) for rapid data delivery.

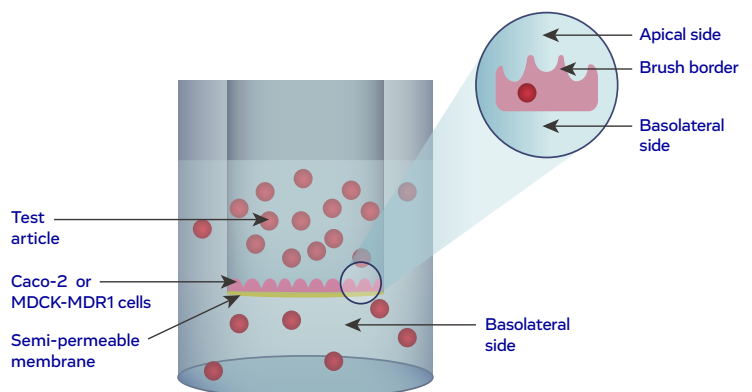
## ▶ PAMPA

- predicts passive permeability at different pH values
- delivers permeability ( $P_e$ ) and recovery values



## ▶ Caco-2 and MDCK-MDR1 Permeability

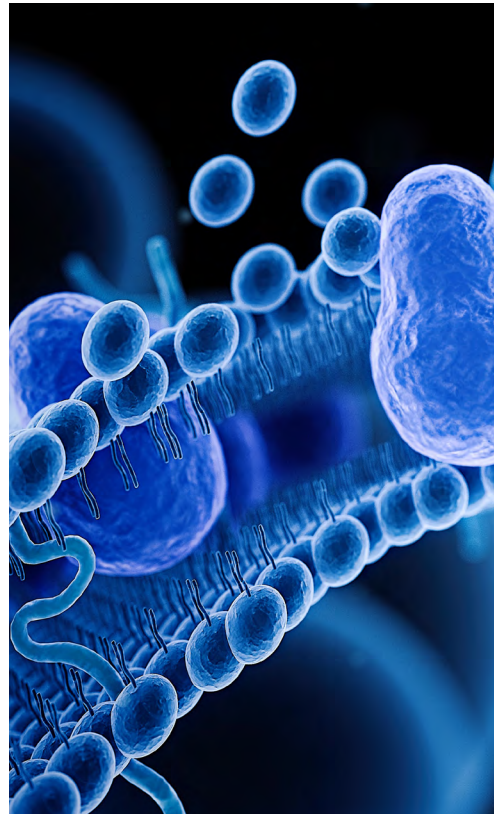
- polarized cell monolayer
- predicts intestinal permeability and/or blood brain barrier permeability as well as P-gp (Caco-2, MDCK-MDR1) and BCRP (Caco-2) efflux
- understand passive permeability using efflux transporter cocktail
- delivers apparent permeability ( $P_{app}$ ), efflux ratio and recovery values





## Benefits of using Cyprotex

- ▶ **Key markets.** Our facilities are based in Europe and the USA covering a range of time zones and reducing shipping times and costs.
- ▶ **Designing screening strategies.** Our experienced ADME experts can guide you on tiered screening strategies based on your chemistry and intended target. You will be supported by a dedicated study manager for your project.
- ▶ **Rapid turnaround.** Through automation, we deliver rapid, high quality data to meet your agreed study timelines.
- ▶ **Flexible approach.** For larger scale regular projects, customer-specific protocols can be designed and implemented on our high-throughput platform.
- ▶ **Sample management.** Store your compound libraries or samples at Cyprotex to save time and cost. Various storage options are available with tracking and sample management through Titian Mosaic software.



### Experience

- ▶ Dedicated study managers are assigned to your project
- ▶ Consultancy from experienced ADME-Tox and analytical experts
- ▶ High quality data using validated methods
- ▶ Comprehensive range of ADME-Tox services

### Liquid Handling Platforms

- ▶ Rapid and consistent pipetting (96 and 384 well)
- ▶ Low volume Echo acoustic liquid handling
- ▶ Tecan and Agilent liquid handling platforms
- ▶ Sample and plate barcoding
- ▶ Managed by LIMS
- ▶ Sample management tracked through Titian Mosaic software

### Analytical Platforms

- ▶ LC-MS/MS, LC-MS
- ▶ High resolution mass spectrometry (HRMS)
- ▶ SeleXION differential mobility separation
- ▶ Chromatography using different separation modes (HILIC, ion pair, ion exchange and chiral chromatography)

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