

# Ion Channel High Throughput Screening

Metrion Biosciences and Assay.Works have formed a partnership to provide high-throughput screening (HTS) capabilities for ion channel drug discovery, including access to pre-validated ion channel cell lines suitable for HTS campaigns.

Metrion has extensive experience of providing high quality biology services for ion channel targets, our team offers:

- Exceptional ion channel electrophysiology and drug discovery expertise
- A team of experienced cell biologists to create novel cell lines
- High quality, cost-effective compound screening
- Detailed characterisation of lead compounds in a range of high quality assays
- Translational services including confirmation of efficacy in stem cell and other phenotypic models
- Rapid reporting and data interpretation by experienced ion channel experts

Assay.Works offers unique and non-redundant small molecule sets which can be combined as modular high-throughput screening decks:

- 150,000 commercially available compounds with freedom to operate.
- Carefully selected by experienced chemists. Lead-likeness and chemotype filtered.
- Molecular mass and purity verified.

## Ion Channel Screening: Metrion's High Quality Platforms

Ion channel drug discovery is reliant on sophisticated screening platforms. Metrion employs electrophysiology platforms to deliver high quality recordings and data. We also offer fluorescence-based screening capabilities suitable for HTS campaigns and follow-up profiling.

### Fluorescence and luminescence

- FLIPR Penta

### Automated electrophysiology

- Qube 384
- QPatch-48 (x2) and QPatch-II

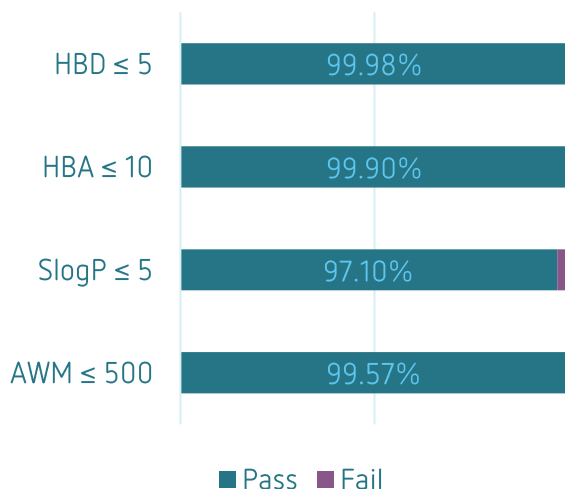
### Characterisation of compound activity

- Manual Patch Clamp (x8)
- Multi-Electrode Array and Impedance Recording

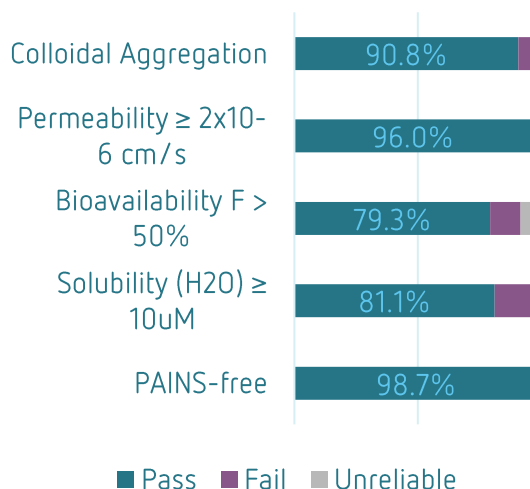


## Assay.Works Small Molecule Library

### Lipinski Rule-of-5

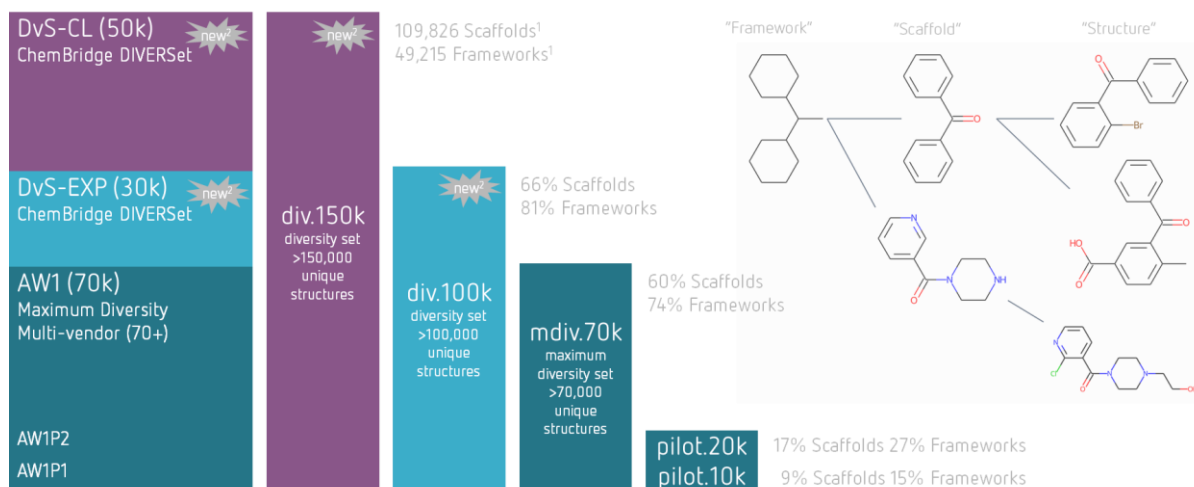


### Property Prediction



**Figure 1:** Physico-chemical property profile according to Lipinski's Rule of 5 (left); Prediction of compound properties and drug-like features: Colloidal Aggregation, Permeability, Bioavailability, Solubility, PAINS.

## Modular Screening Decks for Various Applications and Budgets



**Figure 2:** Compound sets and diversity metrics based on Bemis-Murcko clusters.

### Contact us:

To learn more about our combined capabilities, contact us at:

Assay.Works GmbH  
 Am BioPark 11  
 93053 Regensburg, Germany  
[contact@assay.works](mailto:contact@assay.works)  
[www.assay.works](http://www.assay.works)

Metrion Biosciences Ltd.  
 Granta Park  
 Cambridge CB21 6AL, United Kingdom  
[info@metrionbiosciences.com](mailto:info@metrionbiosciences.com)  
[www.metrionbiosciences.com](http://www.metrionbiosciences.com)

assay.works

metrion  
 biosciences