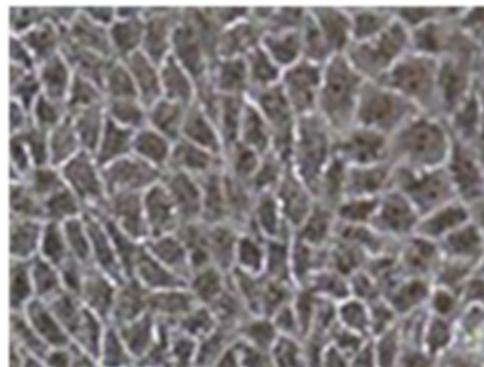


# PREADYPORT-MDR1

## *A Novel, Ready-to-Use Cell-Based Assay System for In Vitro Drug Transport Evaluations*

### FEATURES AND BENEFITS

- Differentiated MDCKII-MDR1 barrier (11 day system), plated on 24 -Transwell or 96-Transwell plates.
- Integrated Transwells allow for easy handling and user-friendly system.
- Proprietary shipping medium allows for up to 5 days of transportation/storage at room temperature.
- The plate can be used up to 4 days after change of shipping medium.
- Adaptable to automation.
- Cost effective for any size laboratory.



MDCKII-MDR1 Cell Line

### TECHNICAL DESCRIPTION

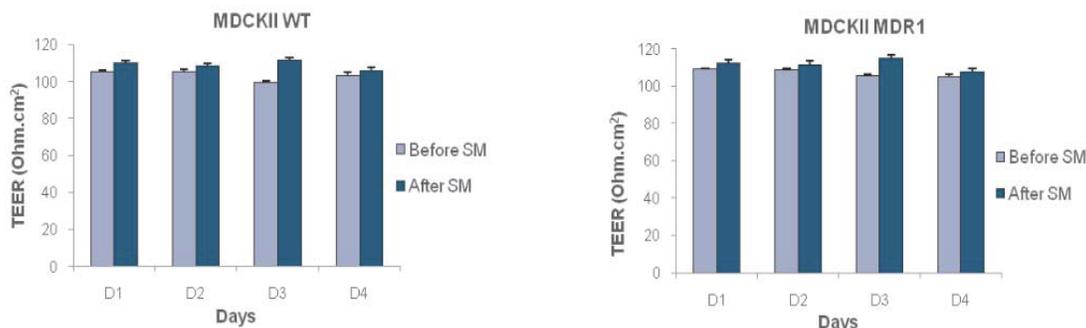
The PreadyPort™ kit consists of differentiated MDCKII cells expressing MDR1 as well as the parental cell line. The innovative and patented shipping media preserves the properties and integrity of the cell barriers throughout transportation and storage. The kit consists of 24 or 96-well permeable plates seeded with differentiated MDCKII cells expressing MDR1 as well as the parental cell line.

This *Ready-to-Use* cell-based monolayer assay kit is intended for in-vitro evaluation of drugs interaction with P-gp/MDR1 transporter. The assay is suitable for performing both inhibition and substrate assessments and is often used to model the net transport events of important fluid compartment barriers in the organism that express p-gp/MDR1 at high levels, like the blood-brain-barrier and the intestine.

### CAPABILITIES

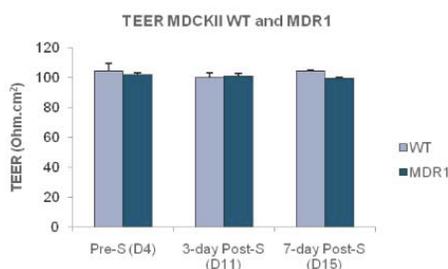
- MDR1 substrate assessment (direct transport studies)
- MDR1 Inhibitor assessment (drug-drug interaction studies)
- Models the net transport events of barriers like the human blood-brain-barriers and the intestine.

## Stability of PreadyPort™ -MDR1 Barrier Properties Under Shipping Conditions



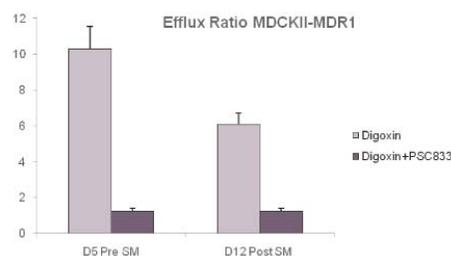
The barrier stability of the PreadyPort™ -MDR1 kit during shipping and storage is presented above. The 11-day MDCKII-WT and MDR1 monolayer were maintained in shipping medium for 1, 2, 3 and 4 days, then their status was evaluated by TEER (trans-epithelial electrical resistance) measurement before applying and 24 hours after removing the shipping medium. The cell monolayer showed no changes in barrier properties up to 4 days in the shipping medium. These results indicate that PreadyPort™ -MDR1 can be stored and transported at room temperature up to 4 days without loss of its barrier functions.

## Stability of PreadyPort™ -MDR1 Barrier Properties after shipment



Immobilization was maintained for 4 days at room temperature. The shipping media was then removed and TEER was measured after 3 and 7 days in standard cell culture.

## Functional stability of PreadyPort™ -MDR1 During shipment



MDR1-mediated digoxin transport was determined from three independent experiments at day 5 of culture (pre-shipment media) and at day 12 of culture (post-shipment media). PSC833 was used as specific MDR1 inhibitor.

## Apparent Permeability of Efflux ratio Values for Known P-gp/MDR1 Substrates and Inhibitors



## PRODUCT INFORMATION

Product Number	Product Name	Format
001-1004	PreadyPort-MDR1 (MDCKII-MDR01) Kit	24-Well Plate
001-1005	PreadyPort-MDR1 (MDCKII-MDR01) Kit	96-Well Plate
001-1006	PreadyPort-CTRL (MDCKII Cells Parental [CTRL]) Kit	24-Well Plate
001-1007	PreadyPort-CTRL (MDCKII Cells Parental [CTRL]) Kit	96-Well Plate
001-1008	PreadyPort-MDR1/CTRL (MDCKII Cell-Based Assay, 50% MDR1[CTRL]) Kit	24-Well Plate
001-1009	PreadyPort-MDR1/CTRL (MDCKII Cell-Based Assay, 50% MDR1[CTRL]) Kit	96-Well Plate

\*PreadyPort™ products are co-developed by Solvo Biotechnology and ReadyCell.  
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