

## ReadyCell™ and SOLVO Biotechnology introduce PreadyPort™-MDR1

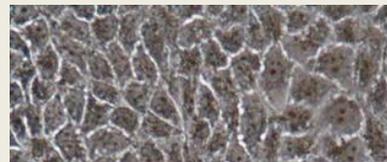
Monolayer assays using transfected MDCKII-MDR1 cells are widely recognized tools, acknowledged by the FDA, to study the interaction of drugs with the P-gp/MDR1 transporter. The MDCKII-MDR1 monolayer system is suitable for performing both substrate and inhibition assessments and is often used to model the net transport events of important fluid compartment barriers in the organism that express P-gp/MDR1 at a high level, such as the blood-brain-barrier and the intestine.

PreadyPort™-MDR1 Kits contain 24 or 96 insert-integrated plates with differentiated MDCKII cells expressing MDR1, as well as the parental cell line. The innovative shipping medium, preserves the properties of the barrier throughout transportation.

The first member of the PreadyPort™ series, the PreadyPort™-MDR1 kit is revolutionary in providing a ready-to-use tool for MDCKII-MDR1 monolayer assays. The kit will allow researchers to perform MDR1 interaction studies on monolayers without worrying about cell-line licensing and culturing.

### PreadyPort™-MDR1 Applications

- MDR1 substrate assessment (direct transport studies)
- MDR1 inhibitor assessment (drug-drug interaction studies)
- Models the net transport events of barriers such as the human blood-brain-barrier and the intestine



MDCKII cell line

### PreadyPort™-MDR1 Benefits

- Available on demand
- User-friendly and easy-handling system
- Flexibility: a window of 4 days for transport measurements
- Adaptable to automation
- Transporter experiments without in-house cell propagation
- Transporter experiments without in-house cell line development or acquisition

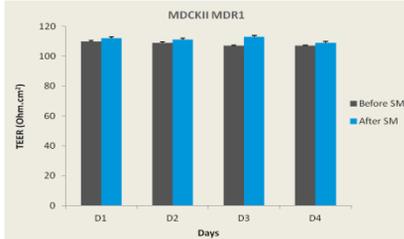
### PreadyPort™-MDR1 Features

- Differentiated MDCKII-MDR1 barrier (11 day system)
- The kit can be used up to 7 days after reception
- Up to 4 days of transportation and storage at room temperature in proprietary shipping medium
- Shipping medium is easy to remove after liquefaction at 37 °C
- Available under a Limited Single-use License without extra charge
- Sample Assay Protocol
- Sample Plate Layouts

Description	ReadyCell™	Solvo Biotechnology
<b>PreadyPort™-MDR1:</b> MDCKII-MDR1 cells-based assay, <b>24-well plate</b>	KRECE-MDR01	SB-PP-MDR1-24TW
<b>PreadyPort™-CTRL:</b> MDCKII parental cells (CTRL), <b>24-well plate</b>	KRECE-CTR01	SB-PP-CTRL-24TW
<b>PreadyPort™-MDR1/CTRL:</b> MDCKII cell based assay, 50% MDR1-50% CTRL, <b>24-well plate</b>	KRECE-MDR01	SB-PP-MDR1-mix-24TW
<b>PreadyPort™-MDR1:</b> MDCKII-MDR1 cell-based assay, <b>96-well plate</b>	KRECE-MDR50	SB-PP-MDR1-96TW
<b>PreadyPort™-CTRL:</b> MDCKII parental cells (CTRL) on <b>96-well plate</b>	KRECE-CTR50	SB-PP-CTRL-96TW
<b>PreadyPort™-MDR1/CTRL:</b> MDCKII cell based assay. 50% MDR1-50% CTRL. <b>96-well plate</b>	KRECE-MDR51	SB-PP-MDR1-mix-96TW

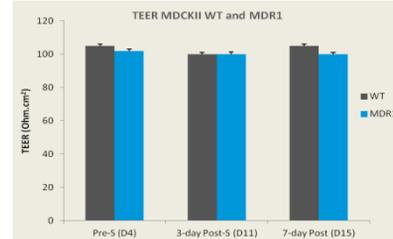
## Experimental Data:

- Stability of **PreadyPort<sup>TM</sup>-MDR1** Barrier Properties under Shipping Conditions



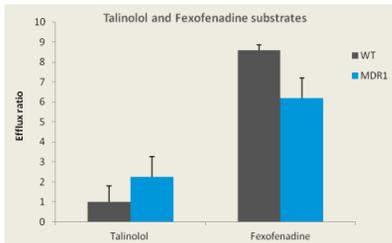
The 11-day MDCK-WT and MDR1 monolayers were maintained in shipping medium for 1,2,3 and 4 days, then their barrier status was evaluated by TEER measurement before applying and 24 hours after removing the shipping medium. Results indicate that PreadyPort<sup>TM</sup>-MDR1 can be stored and transported at room temperature up to 4 days without loss of its barrier functions.

- Stability of **PreadyPort<sup>TM</sup>-MDR1** Barrier Properties after Shipment



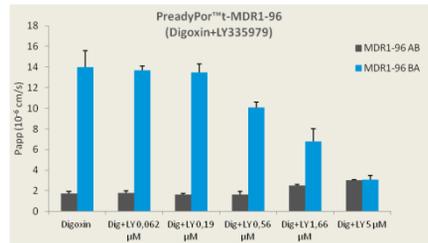
Immobilization was maintained for 4 days at room temperature. The shipping medium was then removed and TEER was measured after 3 and 7 days in standard culture conditions.

- Functional Stability of **PreadyPort<sup>TM</sup>-MDR1** in 24 & 96-well plates format



MDR1-mediated digoxin transport was determined from three independent experiments at D12 of culture in both, 24 and 96-insert-integrated plates formats. Transport of digoxin was specifically inhibited PSC833 Pgp inhibitor.

- Inhibition curve of P-gp using **PreadyPort<sup>TM</sup>-MDR1** 96 insert-integrated plates



Complete inhibition curve of Pgp activity using digoxin and different concentration of LY 335979 as substrate and inhibitor, respectively.

- Efflux Ratio Values for Known P-gp/MDR1 Substrates and Inhibitors in 24 & 96-well formats

