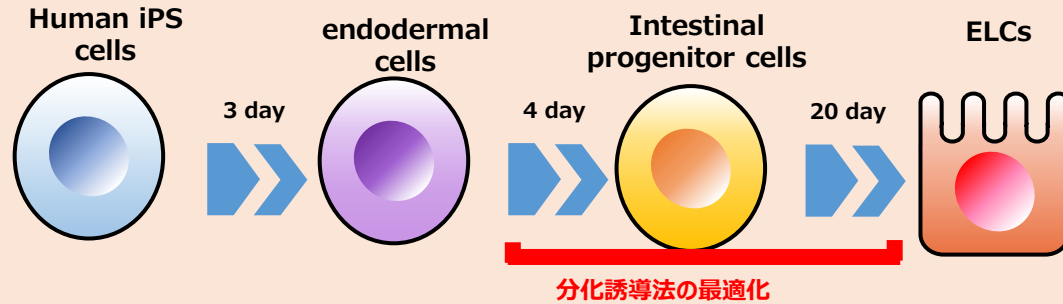


high-performance, low-cost, and easy-to-use intestinal epithelial cells are superior to all commercially available products currently on the market..

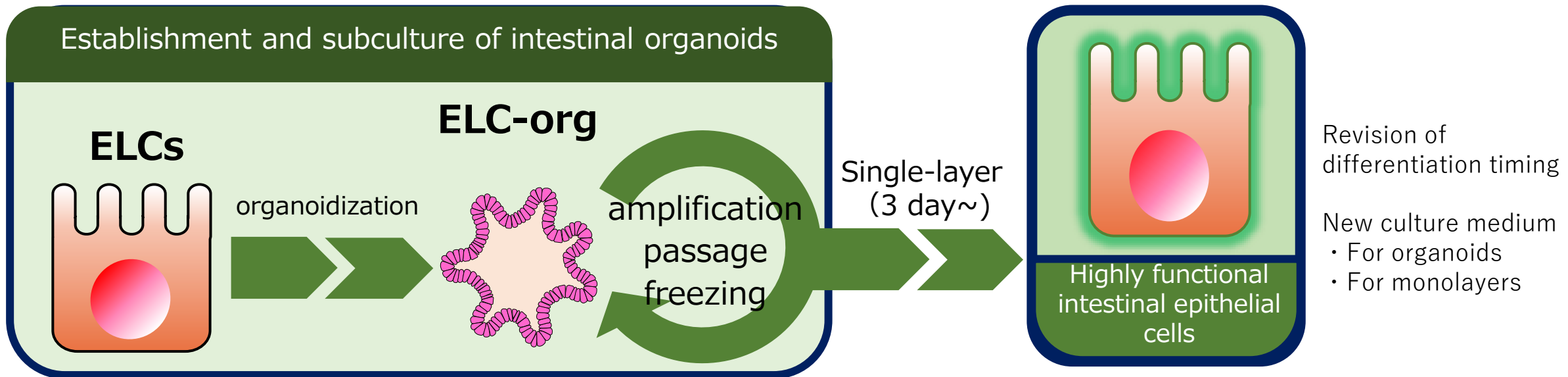
Production of human iPS cell-derived intestinal epithelial cells (ELCs)



Conventional method:

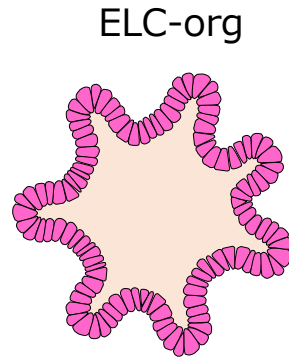
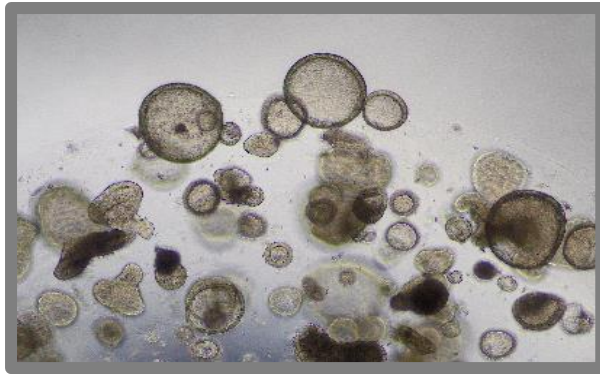
Time consuming
Large lot differences
Impossible to passage culture

Establishment and subculture of intestinal organoids

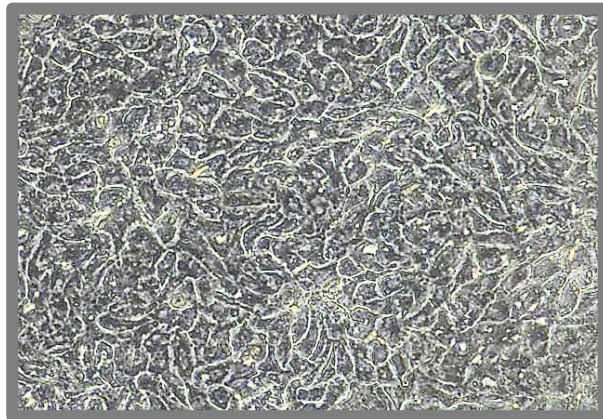


Highly functional intestinal epithelial cells are available at low cost with little batch-to-batch variation and can be used within three days after culture.

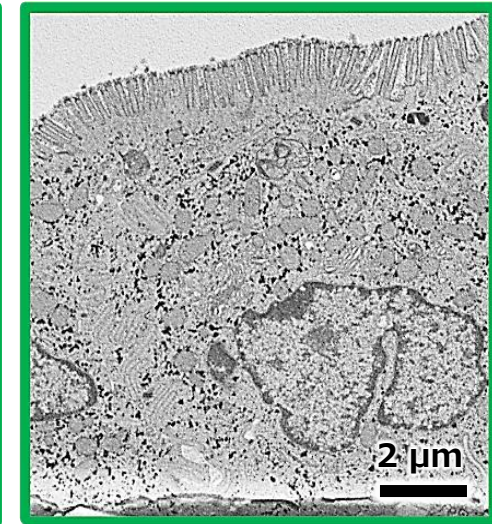
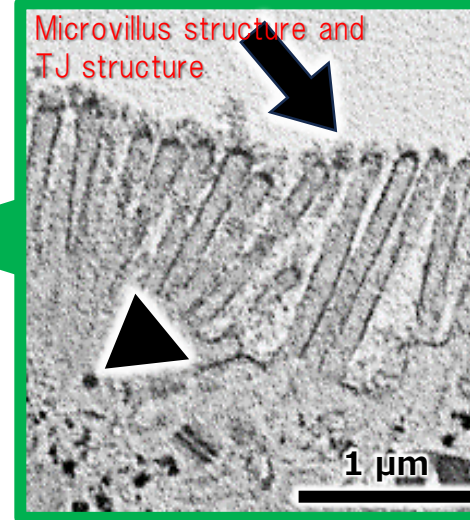
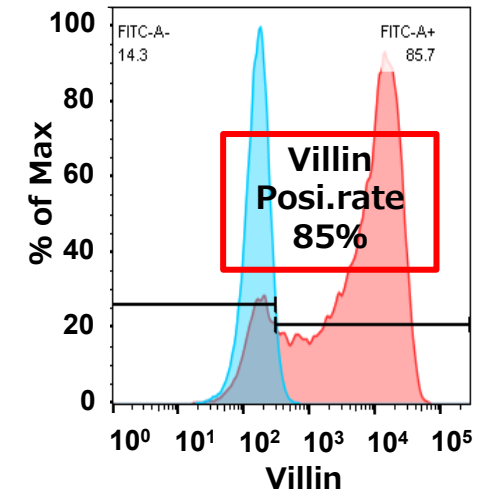
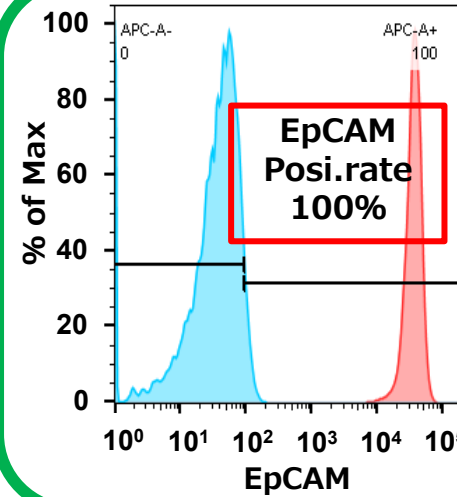
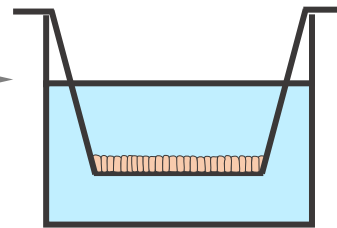
Intestinal organoids form a single layer of epithelial cells when seeded on a chamber.



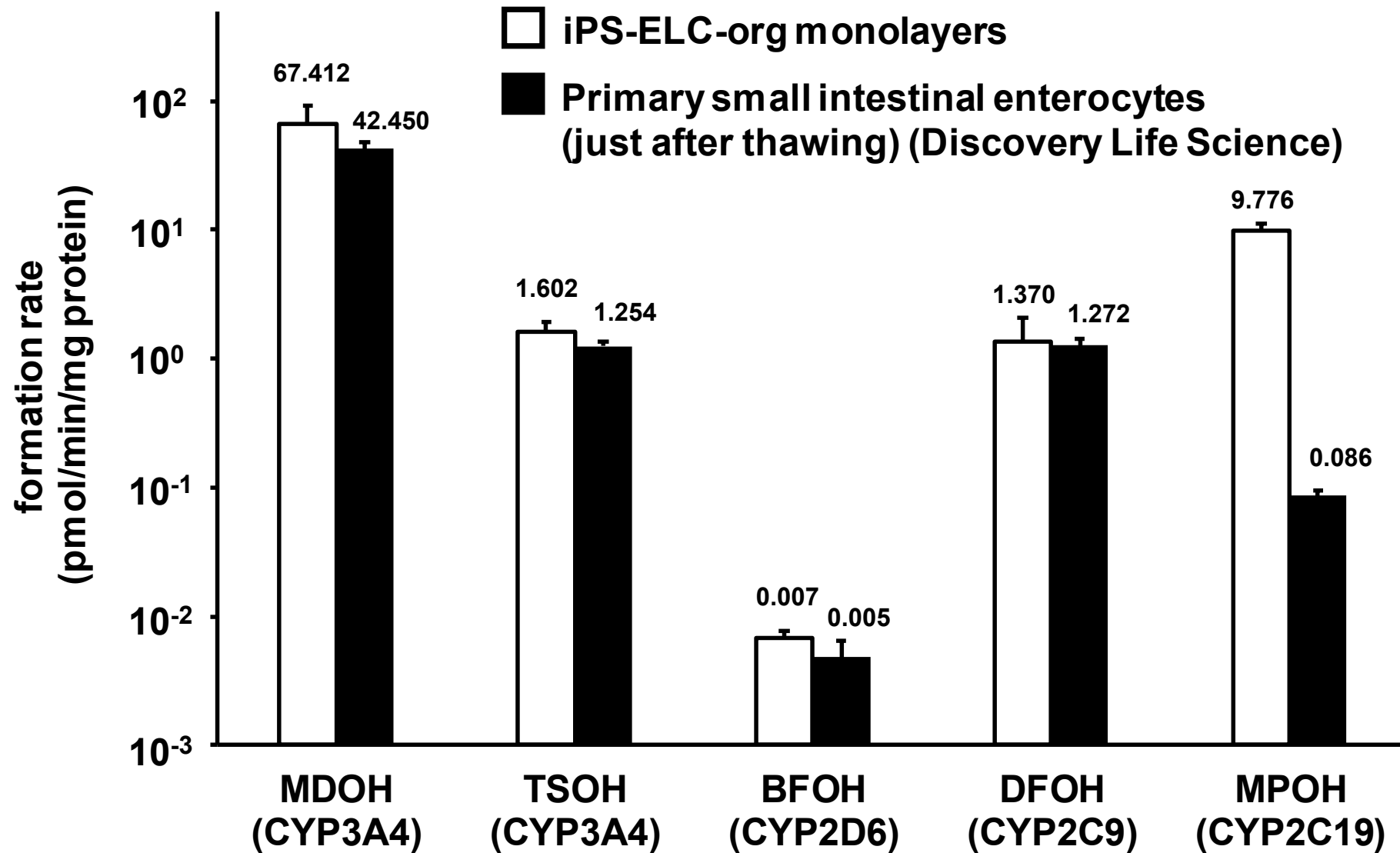
Single-layer



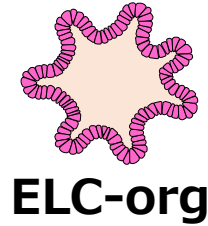
ELC-org-mono



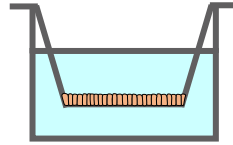
Various drug metabolism enzyme activities are equivalent to those of primary cultured human intestinal cells.



Excellent drug transporter activity

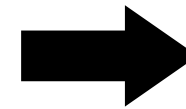


Single-layer

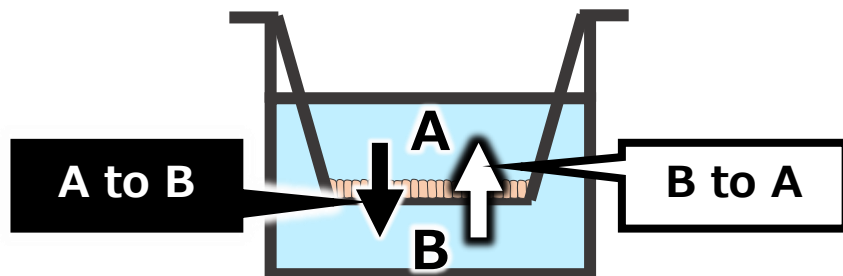
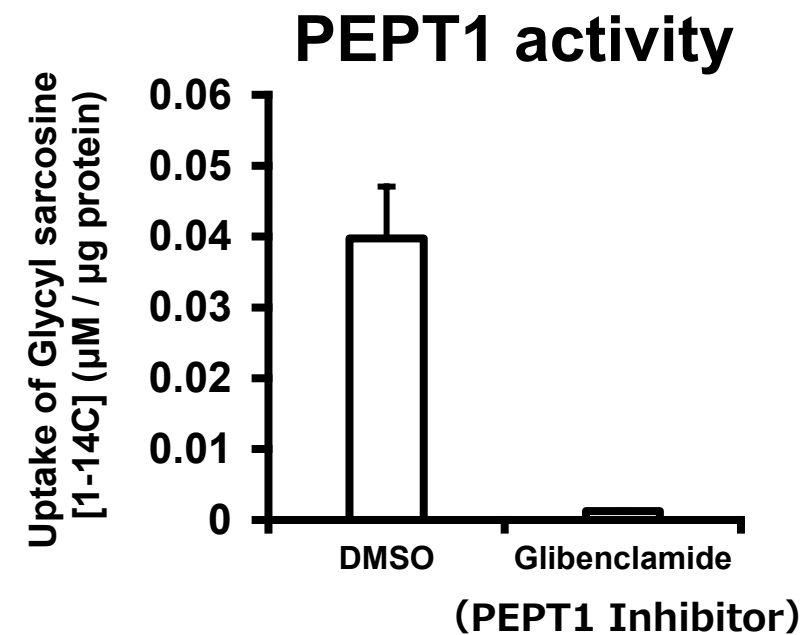
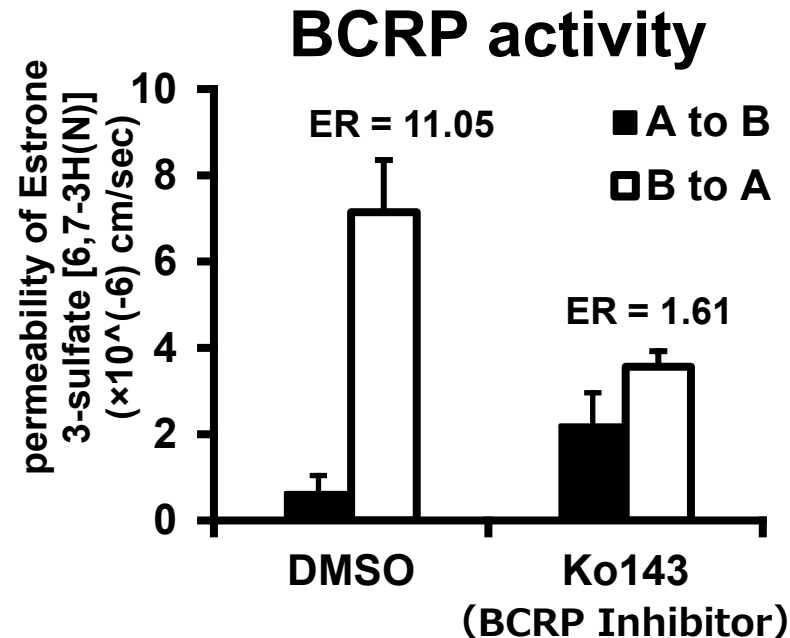
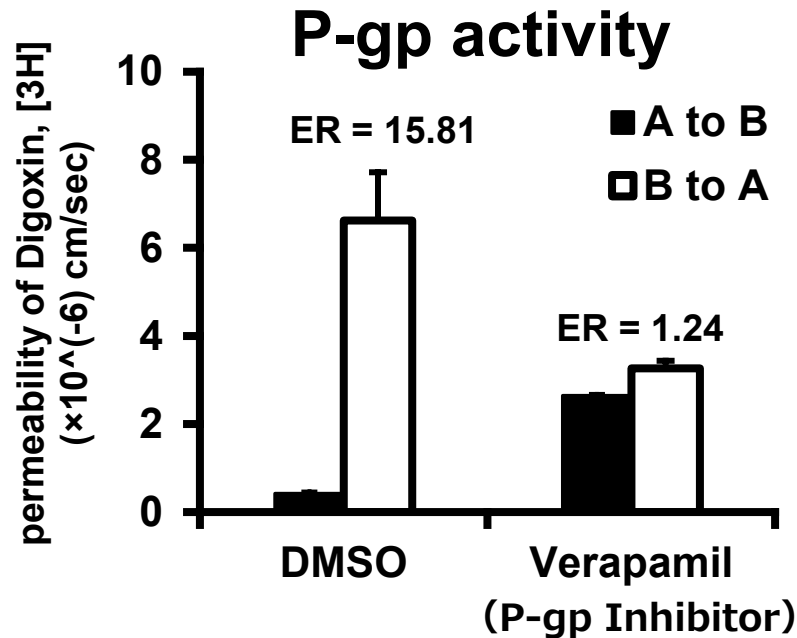


ELC-org-mono

3 Days

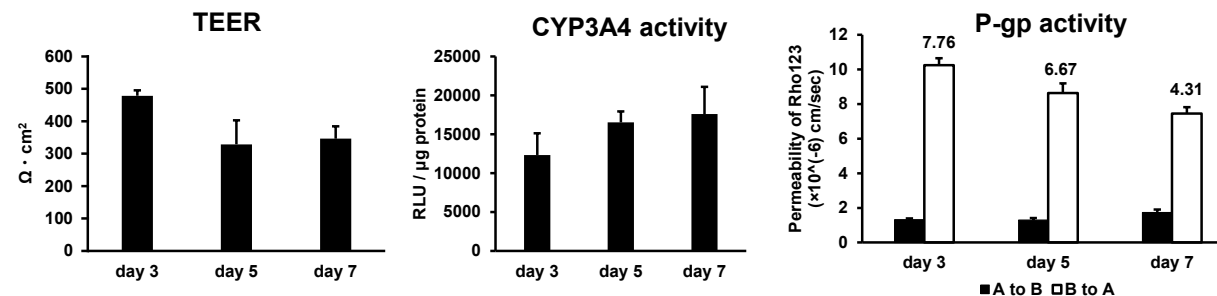
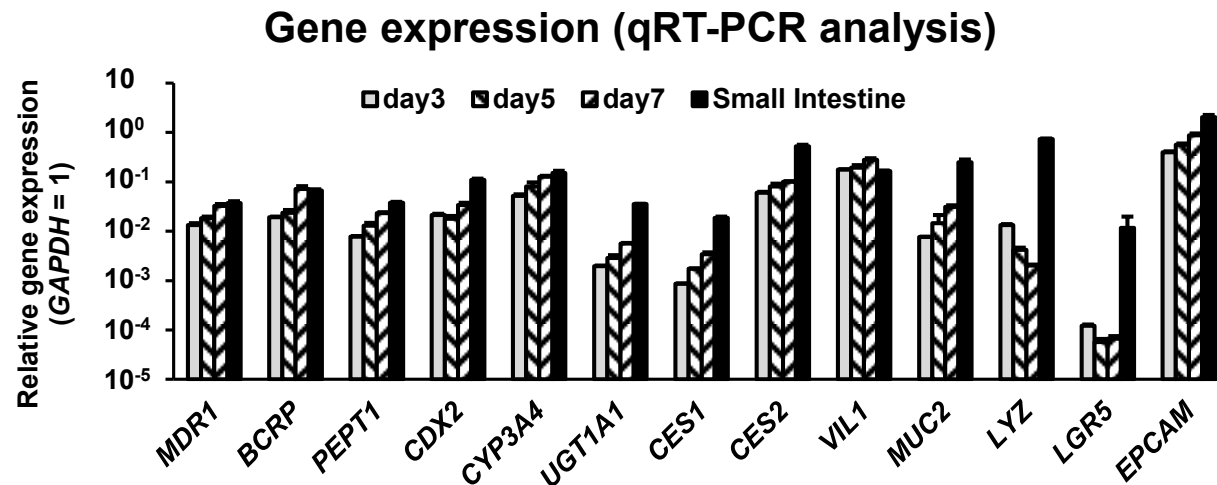


Evaluation of drug transport capacity
using radioactive substrates

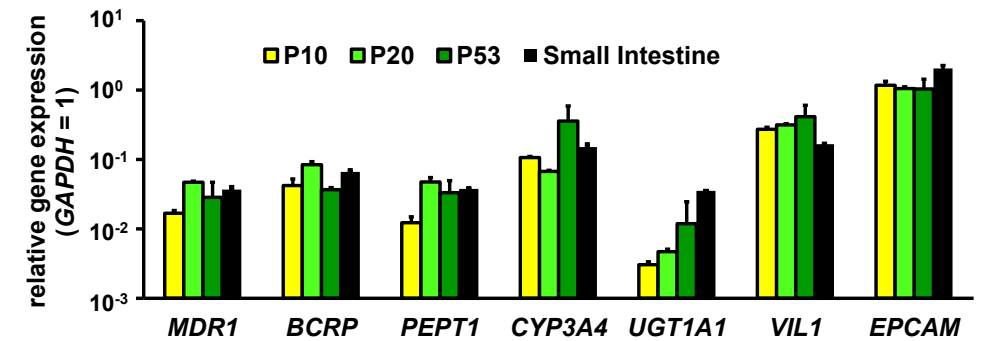


Ready for use in 3 days, Long-term culture and Freezing OK

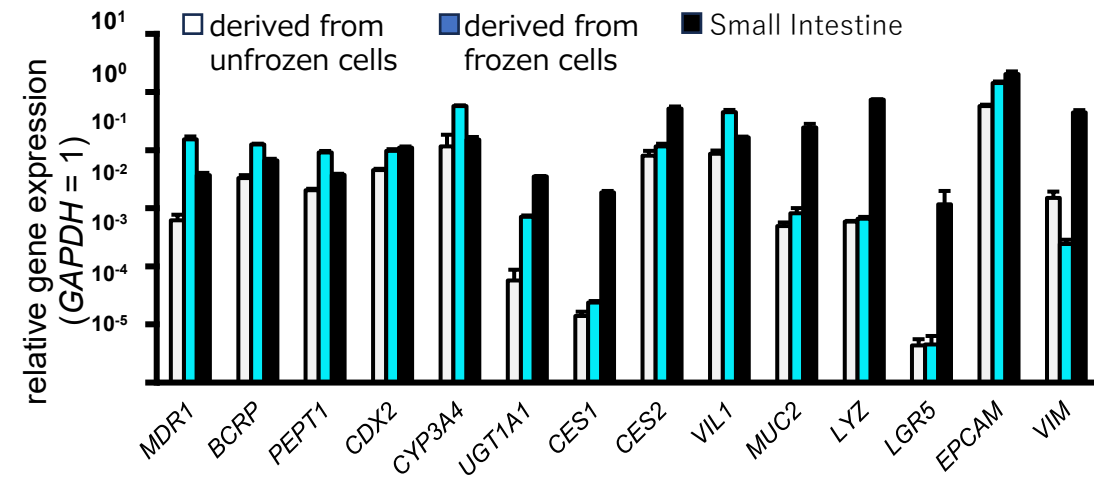
After seeding into Trans-well,
it can be used for experiments
after 3 days of culture.



Performance does not decline
even after one year (53 generations)
of serial culture.



Freezing storage is also possible
without any problems.



Upgrade your human intestinal epithelial cells to a high-performance version.

- Human iPS cell-derived intestinal epithelial cells with higher functionality than conventional cells
- Can be used after a minimum of three days of culture, with extremely small lot-to-lot differences and low cost.
- Trial use is available.
- Various joint research projects are also possible.
(such as drug transport research using genetic modification)
- Supply in a ready-to-use state will also be available soon.

Inui T *et al.*, *Stem Cell Res. Ther.* (2024)

