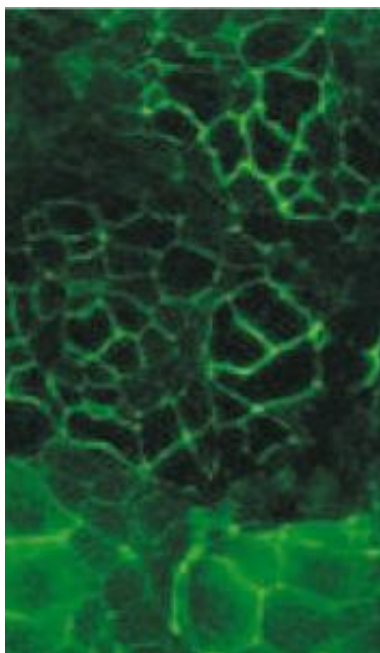


ReadyCell™ has developed CacoGoblet™, a mucus-secreting ready-to-use kit. The kit consists of 24 and 96-well permeable supports seeded with differentiated polarized Caco-2 and human goblet cells on polycarbonate microporous filters. CacoGoblet™ allows *in vitro* intestinal absorption evaluation of drug targets in a barrier physiologically closer to the intestinal epithelium. CacoGoblet™ is flexible, since plates can be used up to 5 days after ideal cell barrier differentiation at day 21, being a time and cost-saving tool for early stage drug discovery and development.



CacoGoblet™ barrier (21 days)

CacoGoblet™ Applications

- Evaluation of oral absorption efficiency, oral bioavailability and oral toxicity
- Adaptation to High Throughput Screening of target compounds
- Study of mechanisms involved in oral and intestinal absorption
- Suitable for research on new delivery systems

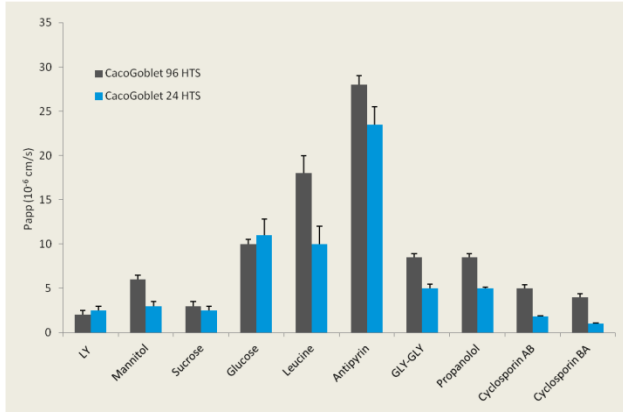
CacoGoblet™ Features

- Cell-based
- Ready-to-use
- 24 and 96-HTS insert-integrated plate format
- Exclusive solid shipping medium

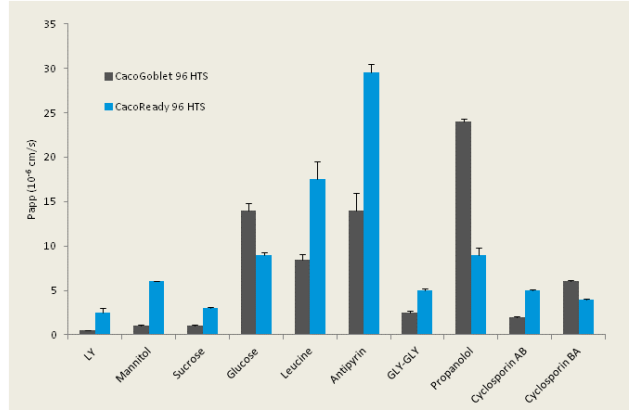
CacoGoblet™ Benefits

- Mucus-secreting CacoGoblet™ represents a more predictive model for compounds or formulations with passive diffusion transport pathway
- CacoGoblet™ allows end-users to avoid in-house maintenance and handling of cell cultures, thus reducing operating costs
- CacoGoblet™ provides a 21-day barrier
- Our exclusive shipping medium ensures the stability of barrier properties
- The kit has been designed to provide a user-friendly and suitable tool for high-throughput automated procedures
- High flexibility as the kit is useable up to 5 days after 21-day cell barrier differentiation
- Shipping medium is easy to remove by liquefaction at 37°C

CacoGoblet™ Experimental Data: Apparent permeability coefficient of standard compounds



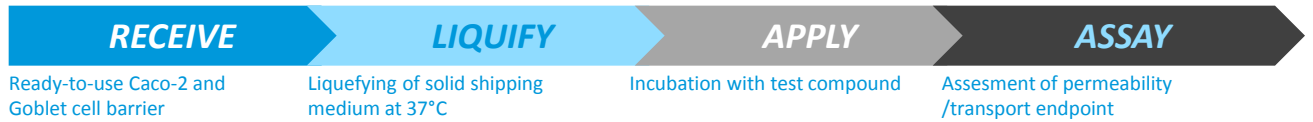
● Functionality comparison of **CacoGoblet™ 96 HTS** vs. **CacoReady™96** HTS barrier, evaluated by permeability assays of several compounds at day 21



● Functionality comparison of **CacoGoblet™96 HTS** vs. **CacoGoblet™24 HTS** barrier, evaluated by permeability assays of several compounds at day 21

	Human Intestine	Caco-2	CacoGoblet™
Composition	absorptive (80%), mucus-secreting (10-30%)	absorptive (100%)	absorptive (50%), mucus-secreting (50%)
Presence of mucus	YES	NO	YES
Paracellular permeability	More permissive epithelium	Very tight epithelium	More permissive epithelium
TEER (ohms)	20-110	2000-3000	80-120

FOUR SIMPLE STEPS OF CacoGoblet™:



Ready-to-use Caco-2 and Goblet cell barrier

Liquefying of solid shipping medium at 37°C

Incubation with test compound

Assesment of permeability /transport endpoint

Formats

CacoGoblet™ kit provides the standard 21-day Caco-2 and human goblet cell barrier on 24 and 96-HTS insert-integrated plates. The kit is shipped at day 14 of differentiation and after shipping medium application. Finally, plates provide a 21-day barrier.

- **CacoGlobet™** cell-based assay, 24 insert-integrated plate:
 - Costar plate, Ref. KRECE-CCG01
- **CacoGlobet™** cell-based assay, 96 insert-integrated plate:
 - Millipore plate, Ref. KRECE-CCG50