Introduction

Testing cell monolayer integrity on Transwell inserts is most often done by measuring transepithelial electrical resistance (TEER) across the cell monolayer or by measuring the amount of a nontransportable fluorescent compound, such as Lucifer Yellow, that leaks from the apical chamber between the cells down into the basolateral chamber. The following is a list of references for doing TEER or Lucifer Yellow leakage measurements. For additional information on equipment for performing TEER measurements visit World Precision Instruments at: http://www.wpiinc.com/products/cell-tissue/EVOM/.

References for TEER and Lucifer Yellow leakage measurements


**Purification and cDNA cloning of a protein derived from Flammulina velutipes that increases the permeability of the intestinal Caco-2 cell monolayer.**  

**In vitro effect of deoxynivalenol on the differentiation of human colonic cell lines Caco-2 and T84.**  

**Simultaneous in vitro measurement of intestinal tissue permeability and transepithelial electrical resistance (TEER) using Sweetana-Grass diffusion cells.**  

**Giardia lamblia rearranges F-actin and alpha-actinin in human colonic and duodenal monolayers and reduces transepithelial electrical resistance.**  

7. Stevenson, BR, et al.  
**Phosphorylation of the Tight-Junction Protein ZO-1 in 2 Strains of Madin-Darby Canine Kidney Cells Which Differ in Transepithelial Resistance.**  

**Rapid reduction of MDCK cell cholesterol by methyl-beta-cyclodextrin alters steady state transepithelial electrical resistance**  

**Characterization of the interaction between Yersinia enterocolitica biotype 1A and phagocytes and epithelial cells in vitro**  
(1999) Infection and Immunity 67: 9

**A bumetanide-sensitive, apically localized Na(+)2Cl(-)K(+) cotransport in the rat inner medullary collecting duct**  

11. Liu, DZ, et al.  
**Dodecylphosphocholine-mediated enhancement of paracellular permeability and cytotoxicity in Caco-2 cell monolayers**  
12. Robledo, RF, et al.
   Modulation of bronchial epithelial cell barrier function by in vitro jet propulsion fuel 8 exposure
   (1999) Toxicological Sciences 51: 1

   Overexpression of the ferritin iron-responsive element decreases the labile iron pool and abolishes the regulation of iron absorption by intestinal epithelial (Caco-2) cells

   Caco-2 versus Caco-2/HT29-MTX co-cultured cell lines: Permeabilities via diffusion, inside- and outside-directed carrier-mediated transport

   The PDZ domains of zonula occludens-1 induce an epithelial to mesenchymal transition of Madin-Darby canine kidney 1 cells - Evidence for a role of beta-catenin/Tcf/Lef signaling

   Increasing epithelial junction permeability enhances gene transfer to airway epithelia in vivo

17. Rotoli, BM, et al.
   Secretin increases the paracellular permeability of CAPAN-1 pancreatic duct cells

   Endothelial permeability and IL-6 production during hypoxia: role of ROS in signal transduction

   AVP reduces transepithelial resistance across IMCD cell monolayers.

20. Hurst RD, Fritz IB.
   Properties of an immortalised vascular endothelial/glioma cell co-culture model of the blood-brain barrier

   Involvement of a conserved tryptophan residue in the UDP-glucose binding of large clostridial cytotoxin glycosyltransferases.
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