

Figure S1. TEM sagittal image of Caco-2 monoculture cultured on 3 μm filters.

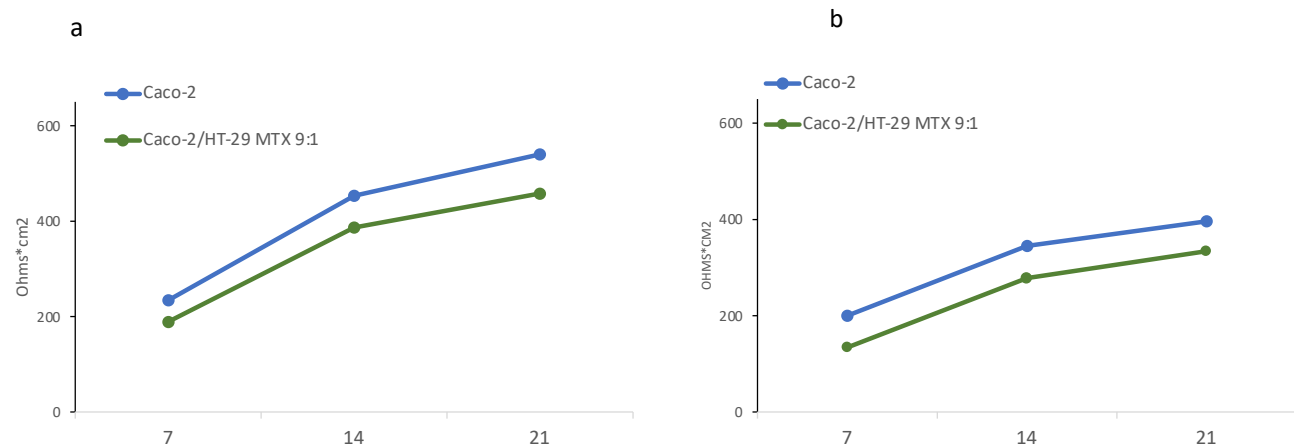
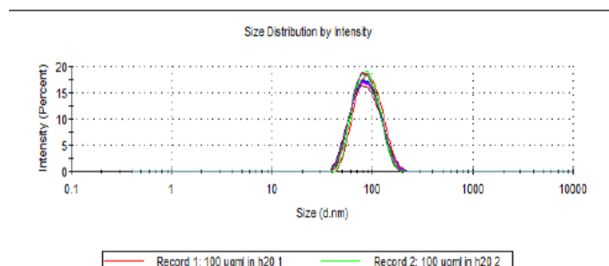


Figure S2. TEER measurement at different days of culture in 1 and 3  $\mu\text{m}$  both for Caco-2 monolayer and Caco-2/HT-29 MTX co-culture.

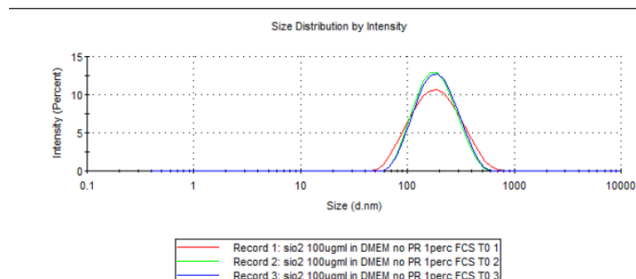
## H2O To

	Size (d.nm):	% Intensity:	St Dev (d.nm):
<b>Z-Average (d.nm):</b> 86,97	<b>Peak 1:</b> 94,65	100,0	27,62
<b>Pdi:</b> 0,089	<b>Peak 2:</b> 0,000	0,0	0,000
<b>Intercept:</b> 0,945	<b>Peak 3:</b> 0,000	0,0	0,000
<b>Result quality :</b> Good			



## DMEM To

	Size (d.nm):	% Intensity:	St Dev (d.nm):
<b>Z-Average (d.nm):</b> 160,3	<b>Peak 1:</b> 206,6	100,0	106,6
<b>Pdi:</b> 0,234	<b>Peak 2:</b> 0,000	0,0	0,000
<b>Intercept:</b> 0,966	<b>Peak 3:</b> 0,000	0,0	0,000
<b>Result quality :</b> Good			



## DMEM T24

	Size (d.nm):	% Intensity:	St Dev (d.nm):
<b>Z-Average (d.nm):</b> 126,2	<b>Peak 1:</b> 178,0	100,0	69,90
<b>Pdi:</b> 0,291	<b>Peak 2:</b> 0,000	0,0	0,000
<b>Intercept:</b> 0,948	<b>Peak 3:</b> 0,000	0,0	0,000
<b>Result quality :</b> Refer to quality report			

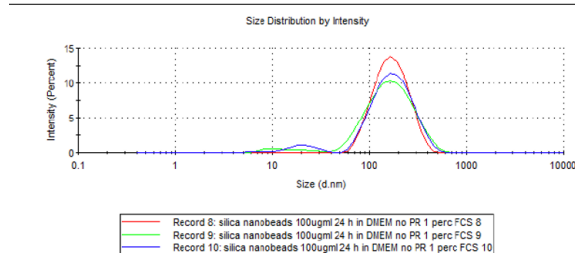


Figure S3. SiO<sub>2</sub> nano beads graphs of population size distribution for intensity obtained by DLS analysis:

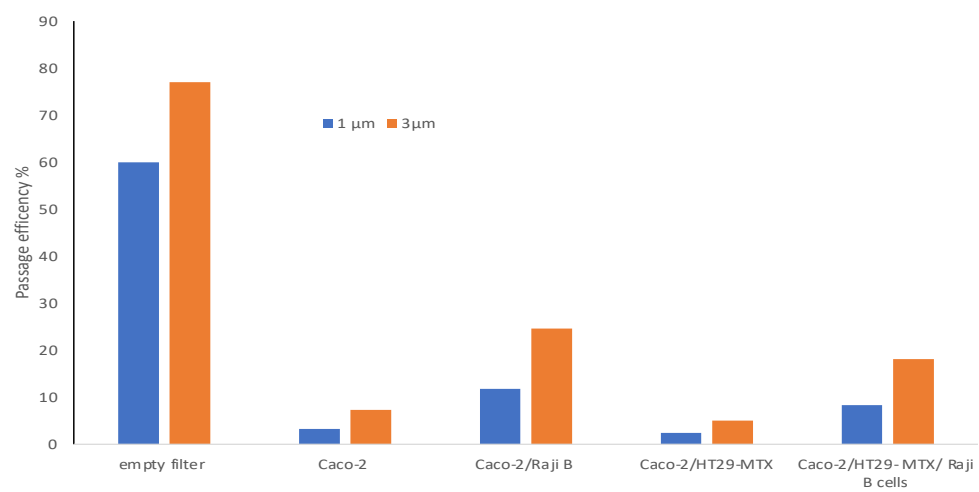


Figure S4. SiO<sub>2</sub> Translocation studies title through empty filters and cell monolayers