

Supplementary Material

A Microwell-Based Intestinal Organoid-Macrophage Co-Culture System to Study

Intestinal Inflammation

Panagiota Kakni ¹, Roman Truckenmüller ¹, Pamela Habibović ¹, Martijn van Griensven ²
and Stefan Giselbrecht ^{1,*}

Supplementary table

Table S1. Description of the culture conditions used for the experiments

Name	Culture Conditions
MIO	Mouse intestinal organoids cultured in microwells
RAW	RAW cells cultured in microwells
TNF- α untreated	MIO treated with TNF- α for 5 days
TNF- α neutralizing antibody	MIO treated with TNF- α for 5 days and TNF- α neutralizing antibody from day 3 onwards
TNF- α removal	MIO treated with TNF- α until day 3 and then remove TNF- α from the culture medium
dMIO+RAW untreated	Direct co-culture of MIO with RAW for 5 days
indMIO+RAW untreated	Indirect co-culture of MIO with RAW for 5 days
indMIO+RAW removal	Indirect co-culture of MIO with RAW and on day 3 removal of RAW cells

Supplementary figures

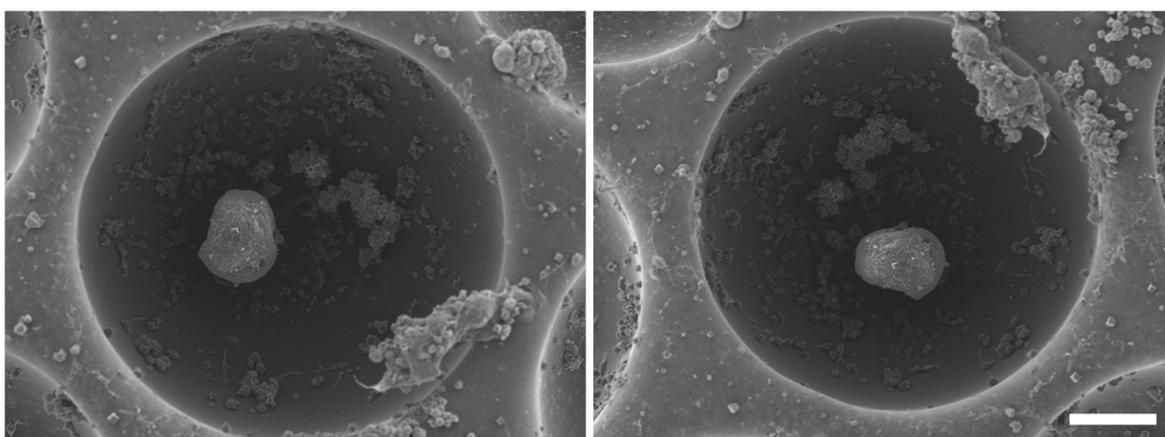


Figure S1. SEM images demonstrating the direct co-culture of intestinal organoids with RAW 264.7 cells. Scale bar represents 100 μ m.

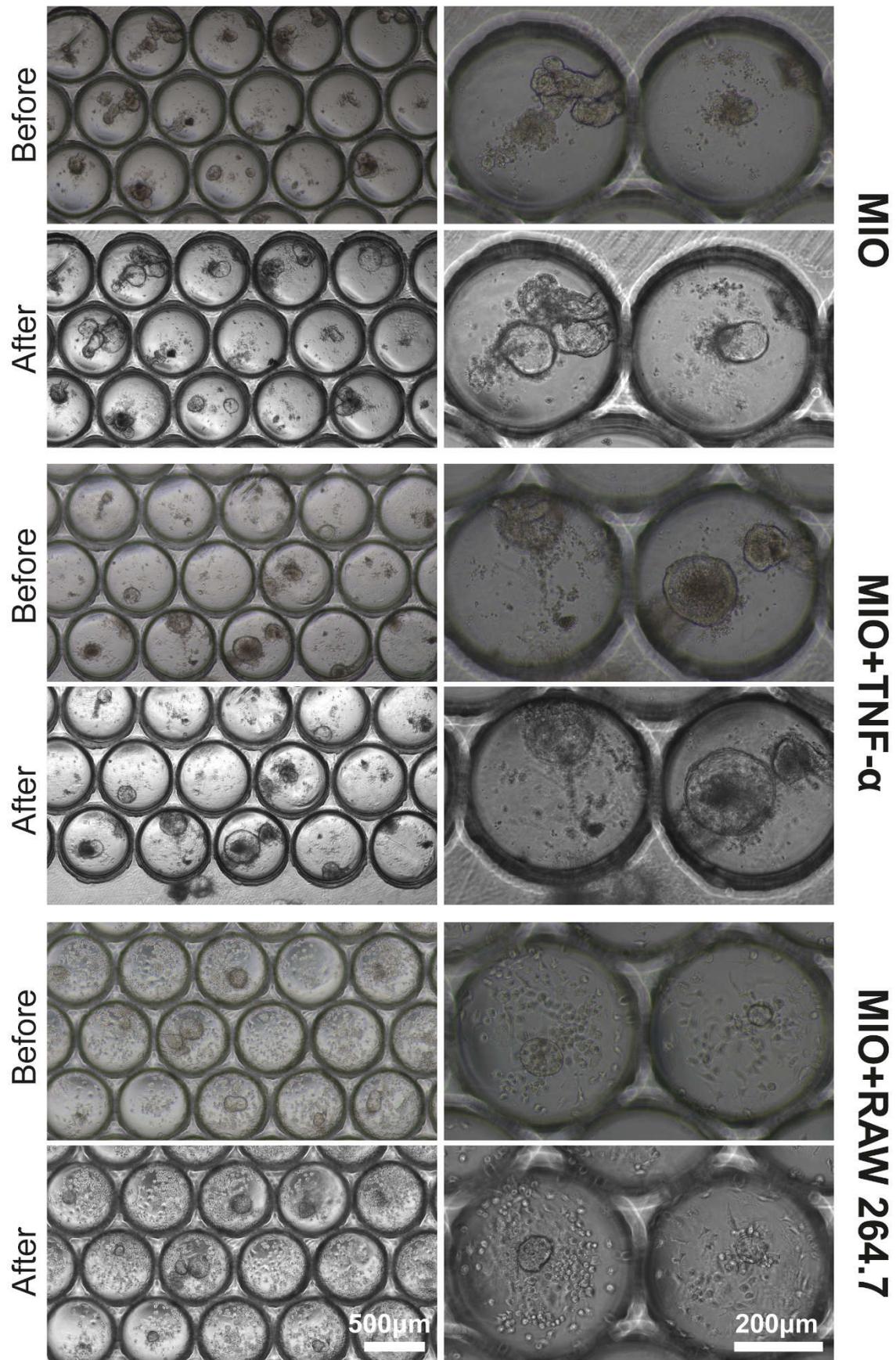


Figure S2. Bright-field images demonstrating the swelling of organoids upon treatment with 5 µM Forskolin for 3 hours.

Supplementary video

Video S1. Time-lapse imaging of the direct co-culture of intestinal organoids with 50,000 RAW 264.7 cells. Single plane images were taken every 1 h for 3 days.