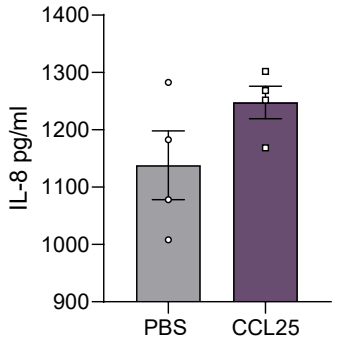
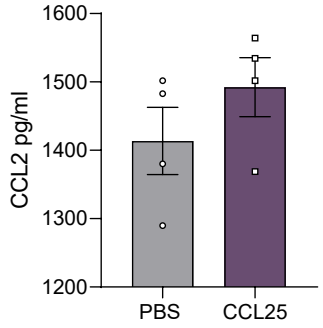
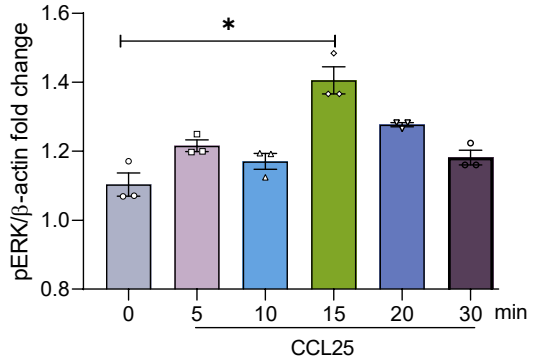
S1



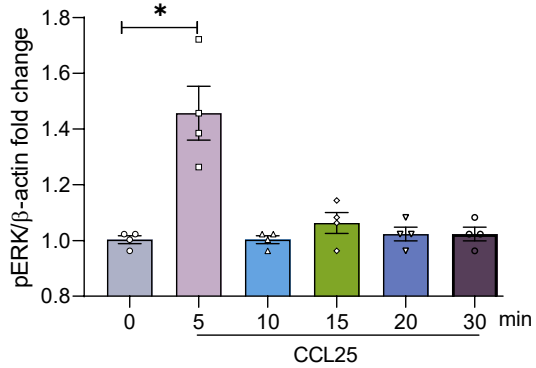
S2



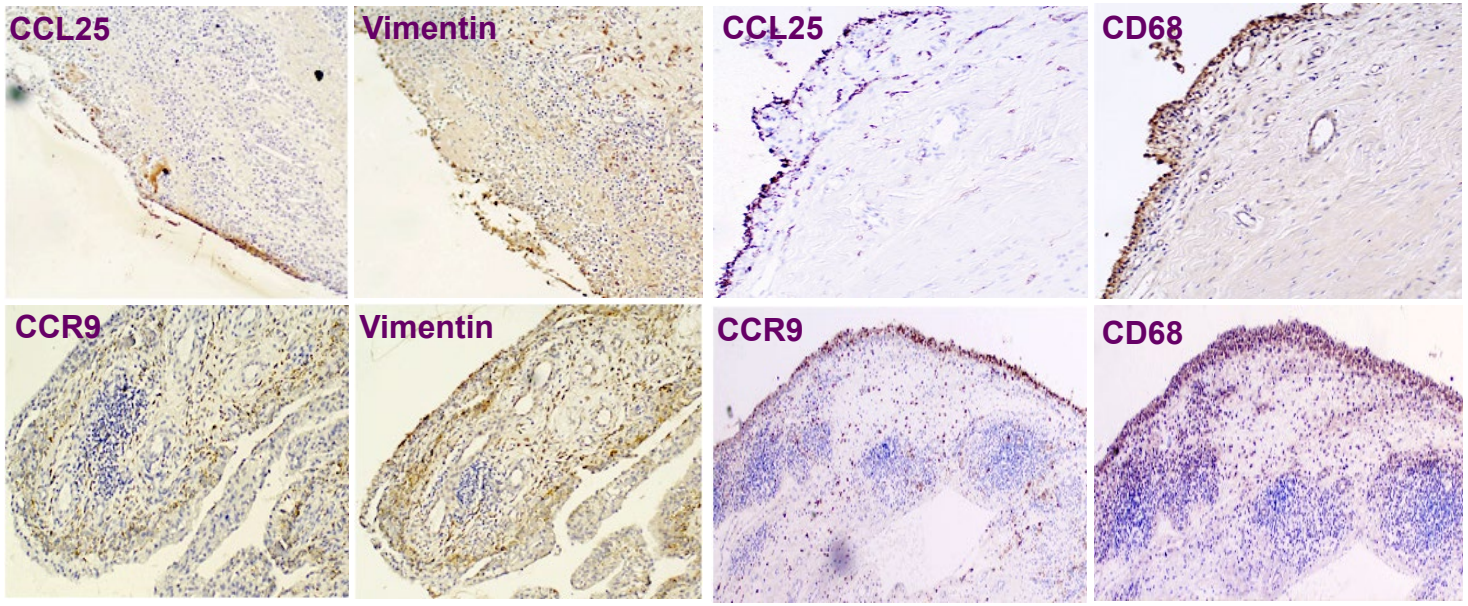
S3



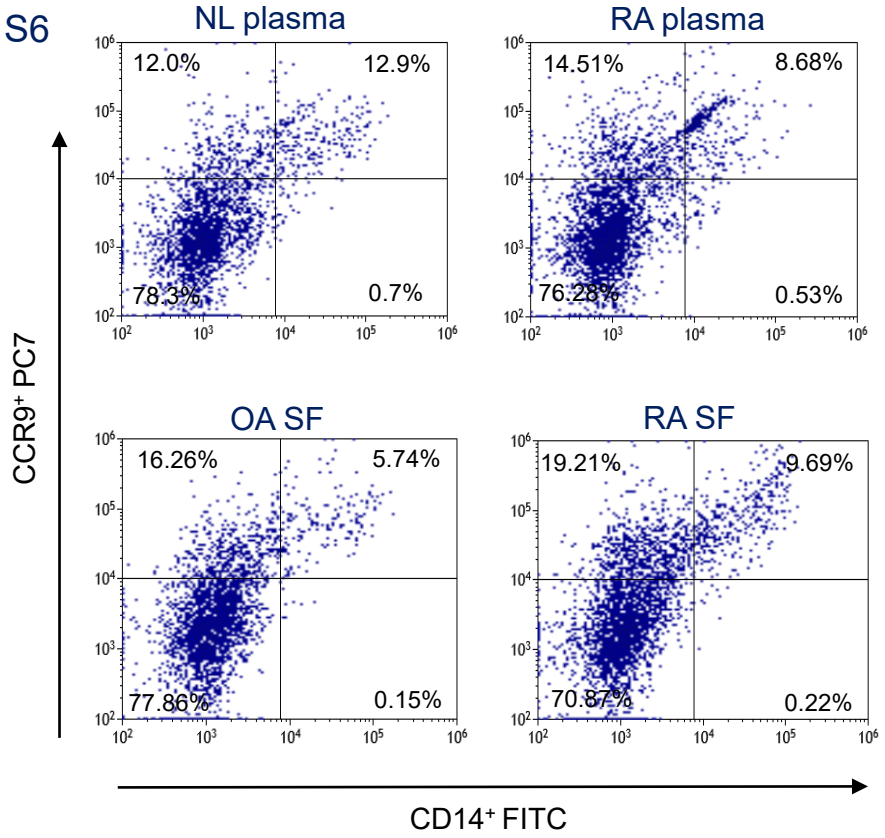
S4



S5



S6

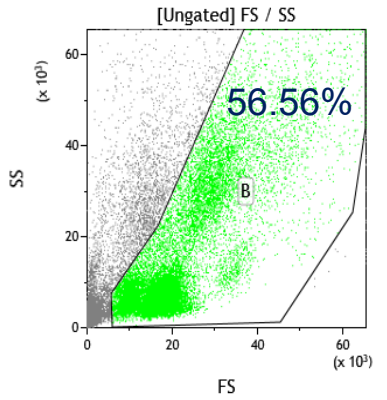


Supplementary 1. Cocultured RA FLS and RA MΦs were either untreated or treated with CCL25 (500ng/ml) for 24h, before quantifying IL-8 (S1) and CCL2 (S2) by ELISA, n=4 independent experiments performed in duplicates. X-rays from pERK and actin Western blot analysis were scanned and the band density was quantified in RA FLS (S3, shown in Fig. 2D, n=3) or RA MΦs (S4, shown in Fig. 3H, n=4) activated by CCL25 (0-30min) using Image J. RA ST serial sections were immunostained with CCL25 Ab (1:50), CD68 Ab (1:100), Vimentin Ab (1:2500) or CCR9 Ab (1:250) (S5) in the validation of Figs. 1A & 1F findings, n=3 independent STs. The frequency of $CD14^{+}CCR9^{+}$ cells is shown in PB MΦs that were treated with 1:10 of NL plasma, RA plasma, OA SF or RA SF for 24h and were analyzed by flow cytometry (S6) in support of Fig. 3D in 3 independent samples.

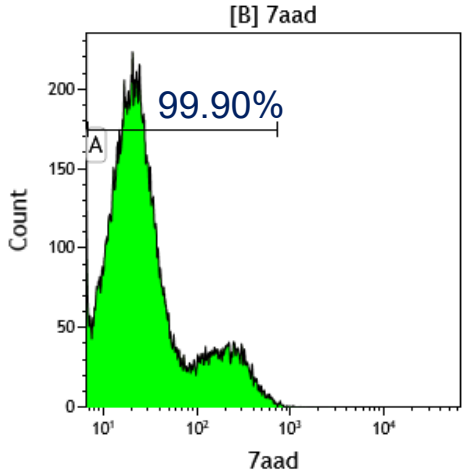
Strategy for gating CD14+ macrophages

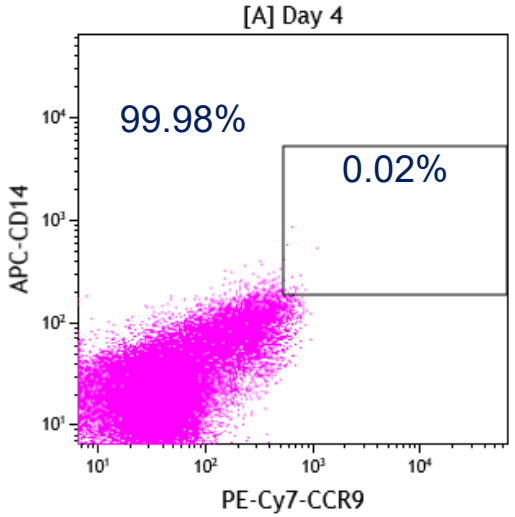
Supplementary 2

Unstained Control

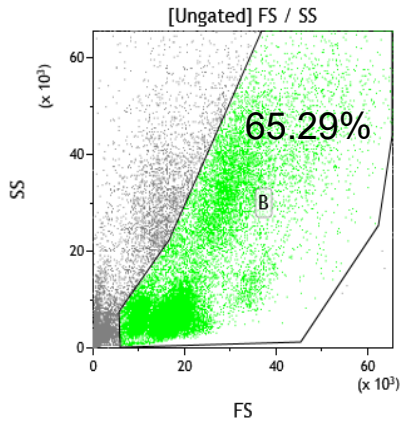


Gate	Number	%Total
All	68,433	100.00
B	38,708	56.56

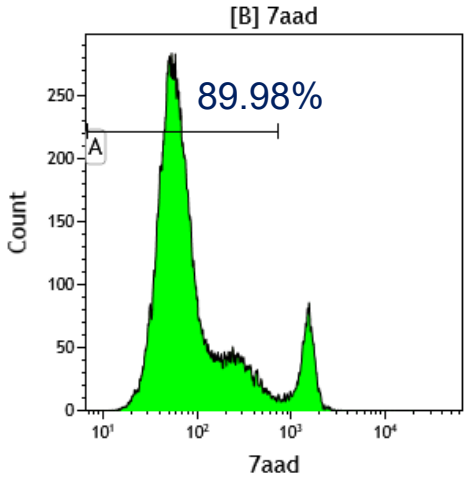


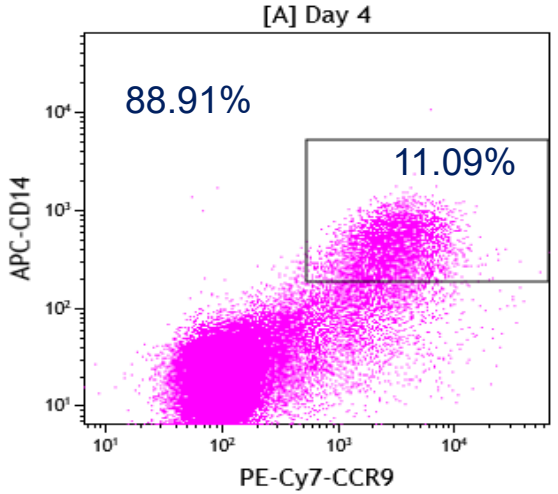


Stained Sample



Gate	Number	%Total
All	58,370	100.00
B	38,110	65.29

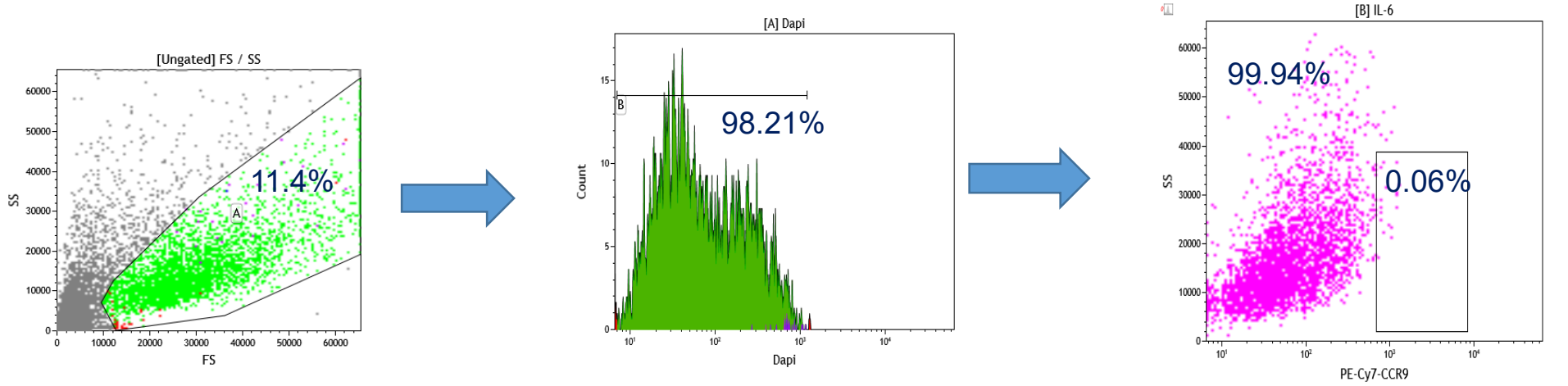




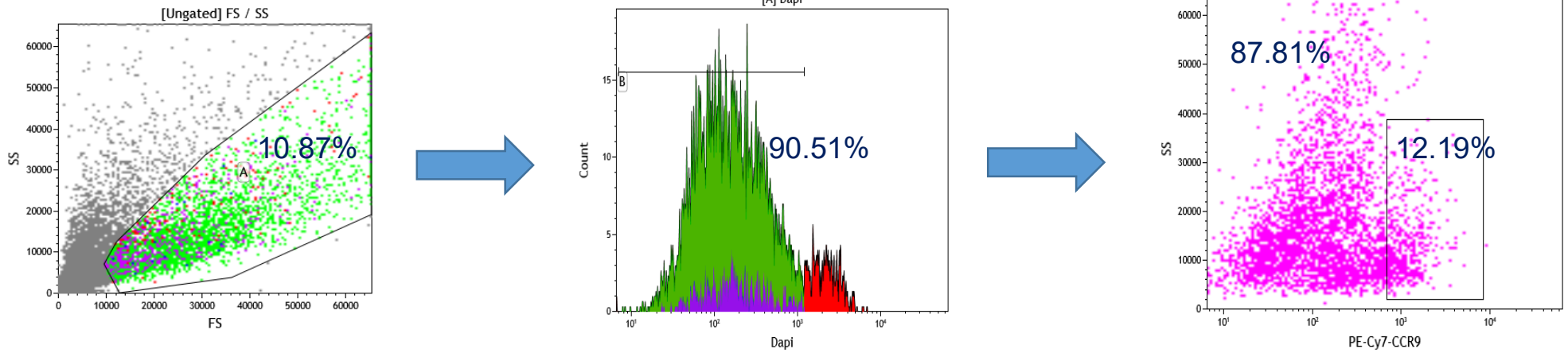
Supplementary 2. Data was collected using the Cytoflex flow cytometer and analyzed by Kaluza software. Cells were identified by their scatter properties and the cell surface expression of $CCR9^{+}$ was analyzed on CD14+ cells.

Strategy for gating Fibroblasts or HUVECs

Unstained Control



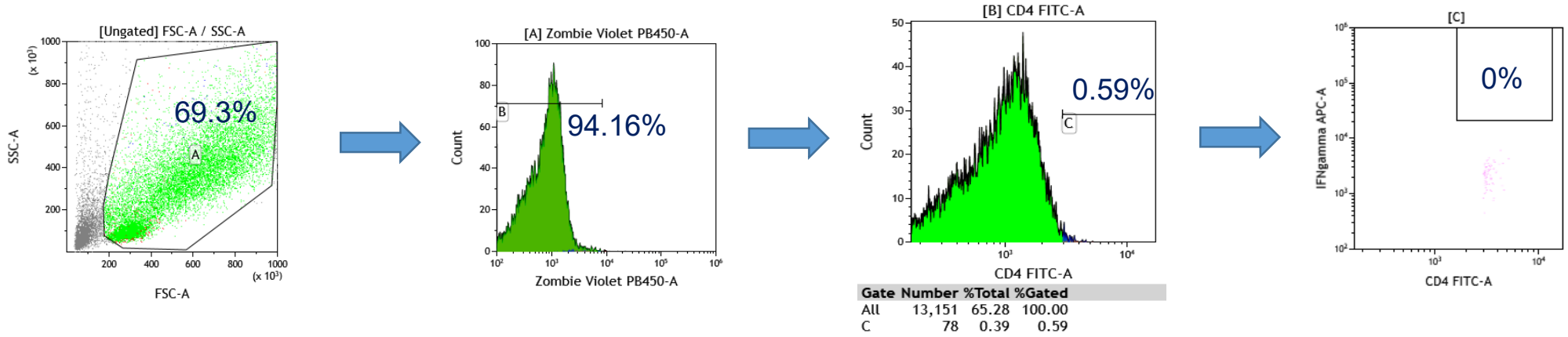
Stained sample



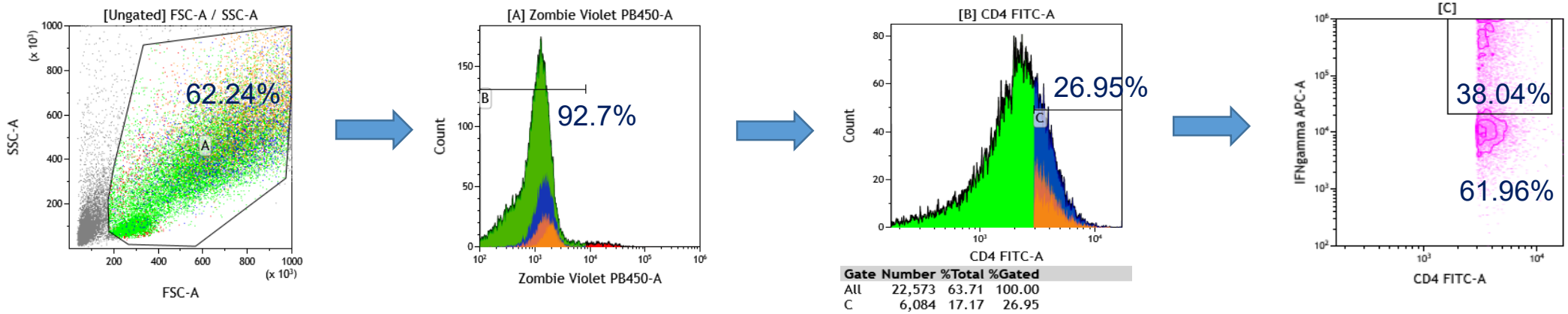
Supplementary 3. Data was collected using the Cytoflex flow cytometer and analyzed by Kaluza software. Cells were identified by their scatter properties and the cell surface expression of $CCR9^{+}$ was analyzed on RA FLS and HUVECs.

Strategy for gating CD4+ T cells

Unstained Control



Stained sample



Supplementary 4. Data was collected using the Cytoflex flow cytometer and analyzed by Kaluza software. Cells were identified by their scatter properties and the impact of CCL25 stimulation on Th1 and Th17 cell polarization was determined.