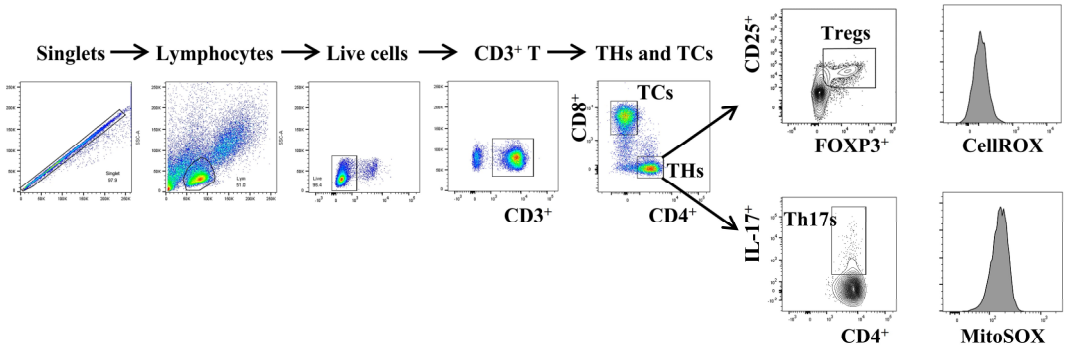

Supplementary Data S1. Gating strategy for defining T cell subpopulations and ROS expression

PBMC from patients with RA (n = 40) and healthy controls (n = 10) were isolated from whole blood samples. Single cells were gated in isolated PBMCs using FSC-A and FSC-H, and lymphocyte populations were determined with Live/Dead Aqua staining. CD3-expressing T cells were gated from live singlet lymphocytes. Following CD4 and CD8 expression, $CD3^+$ T cells were defined as THs ($CD3^+CD4^+CD8^-$) and TCs ($CD3^+CD8^+CD4^-$). Following fixation and permeabilization using FOXP3/transcription factor staining buffer, cells were stained with specific antibodies for FOXP3 and IL-17A. THs were further classified as TH17s ($CD3^+CD4^+$IL-17^+) and Tregs ($CD3^+CD4^+CD25^+FOXP3^+$). After washing, each T cell subset was incubated with two types of ROS dye, CellROX or MitoSOX. Plots and histograms are representative examples with PBMCs from patient with Moderate RA.