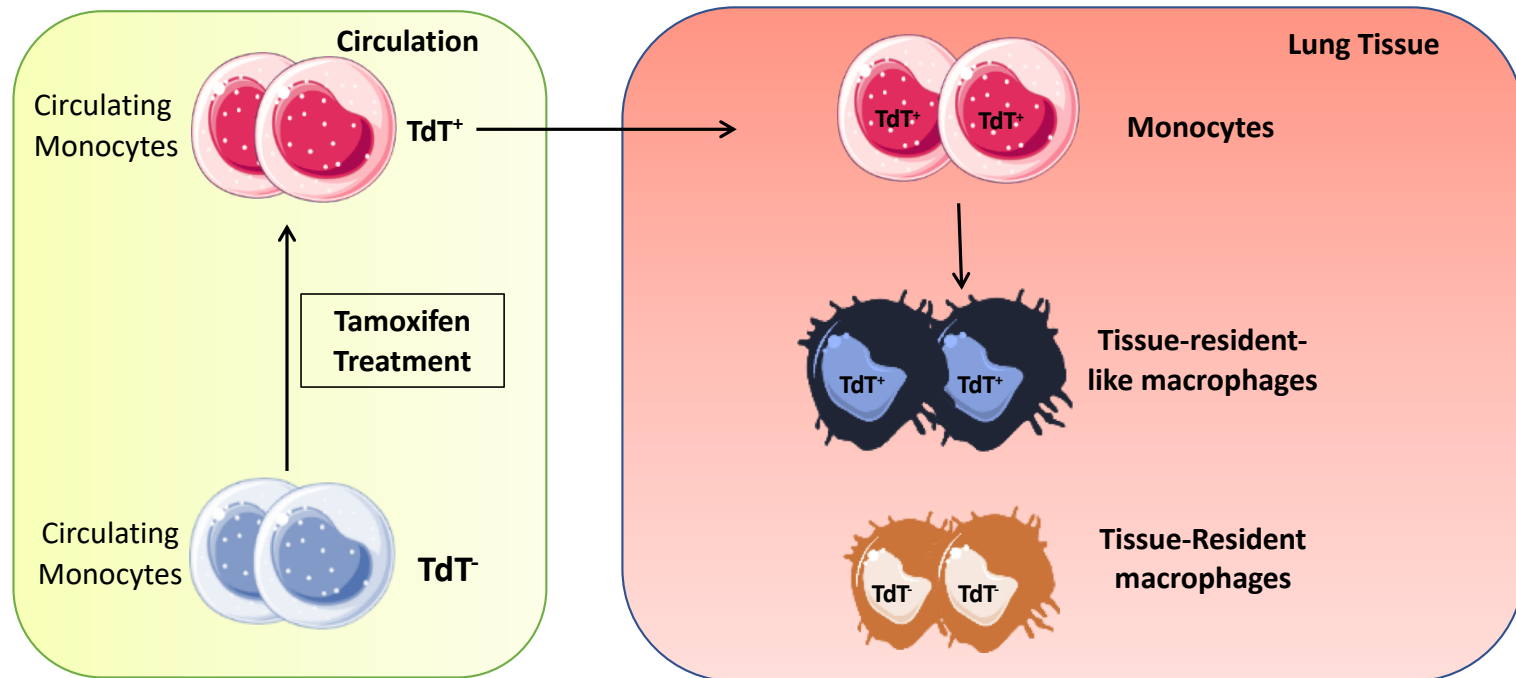
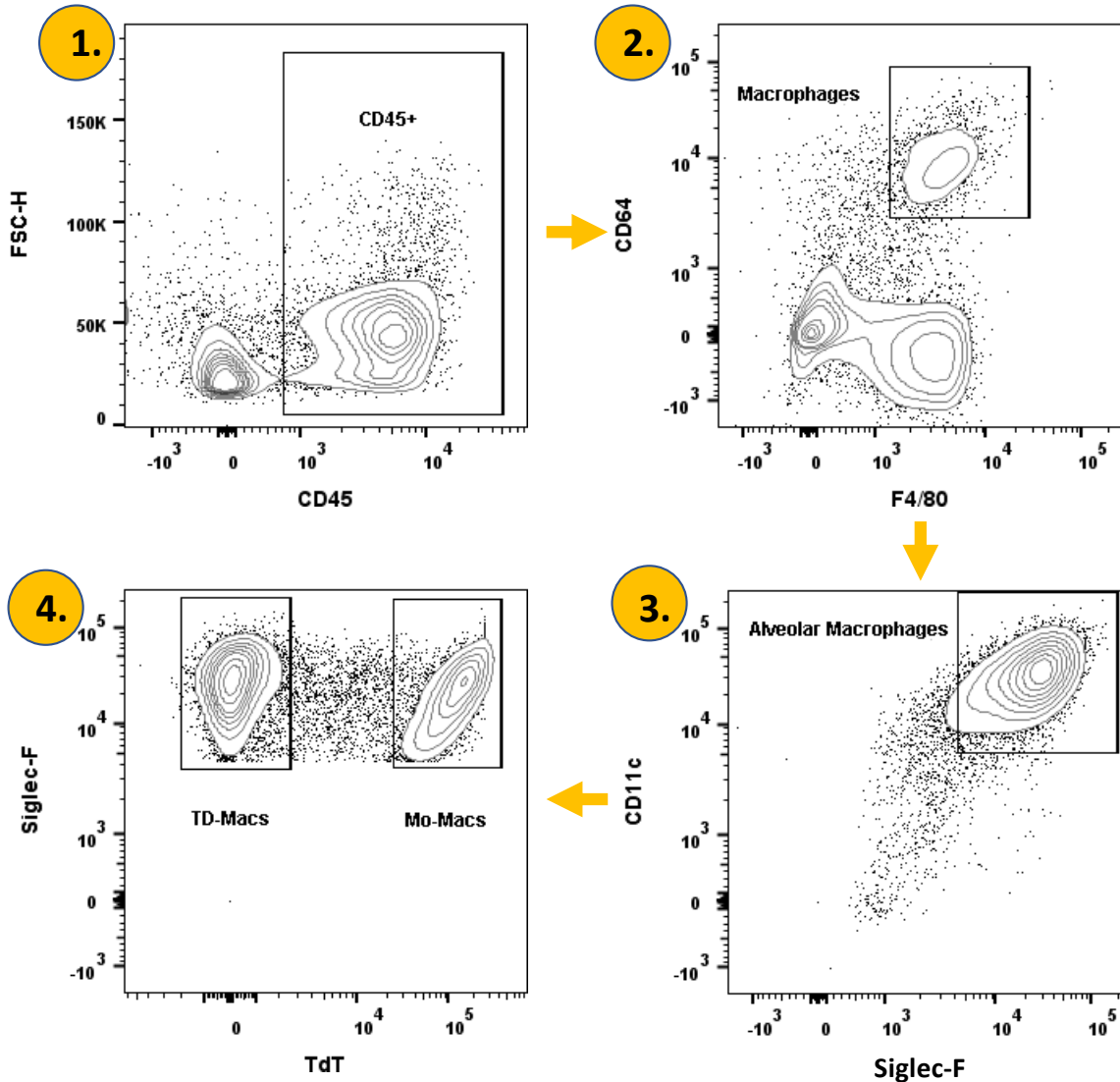




# “Fate-Mapper” Mouse Model- $Cx3Cr1^{CreER}$ X $Rosa26^{TdT}$



Using the  $Cx3Cr1^{CreER}$  crossed with the  $Rosa26^{DT}$  mouse as described in Gundra UM, et al. Nat Immunol. 2017, we are able to accurately gate on both tissue-derived and monocyte-derived macrophages in the lung as described in the following gating strategy. Monocyte-derived macrophages that take on a tissue-resident like phenotype will be Td Tomato ( $TdT^+$ ).



Antibodies			
Marker-Color	Company	Clone	Conc (sort)
CD45-APC-Cy7A	Biolegend	30-F11	1:200
CD64-BV711	Biolegend	M1/70	1:100
F4/80-APC	Biolegend	BM8	1:100
CD11c-PE-Cy7A	Biolegend	N418	1:200
SiglecF-PerCp-Cy5.5	Invitrogen	1RNM44 N	1:200

1. After gating on all live cells and singlets, gate on all CD45<sup>+</sup> cells.
2. Identify macrophage population by gating on F4/80<sup>+</sup>CD64<sup>+</sup> as it provides a clean population and removes eosinophils.
3. Then gate on CD11c<sup>+</sup>Siglec-F<sup>+</sup> cells to identify the alveolar macrophage population.
4. From here, you can observe our tissue-derived macrophages (TD-Macs) which do not express TdT, and our TdT<sup>+</sup> population of monocyte-derived macrophages (Mo-Macs).