

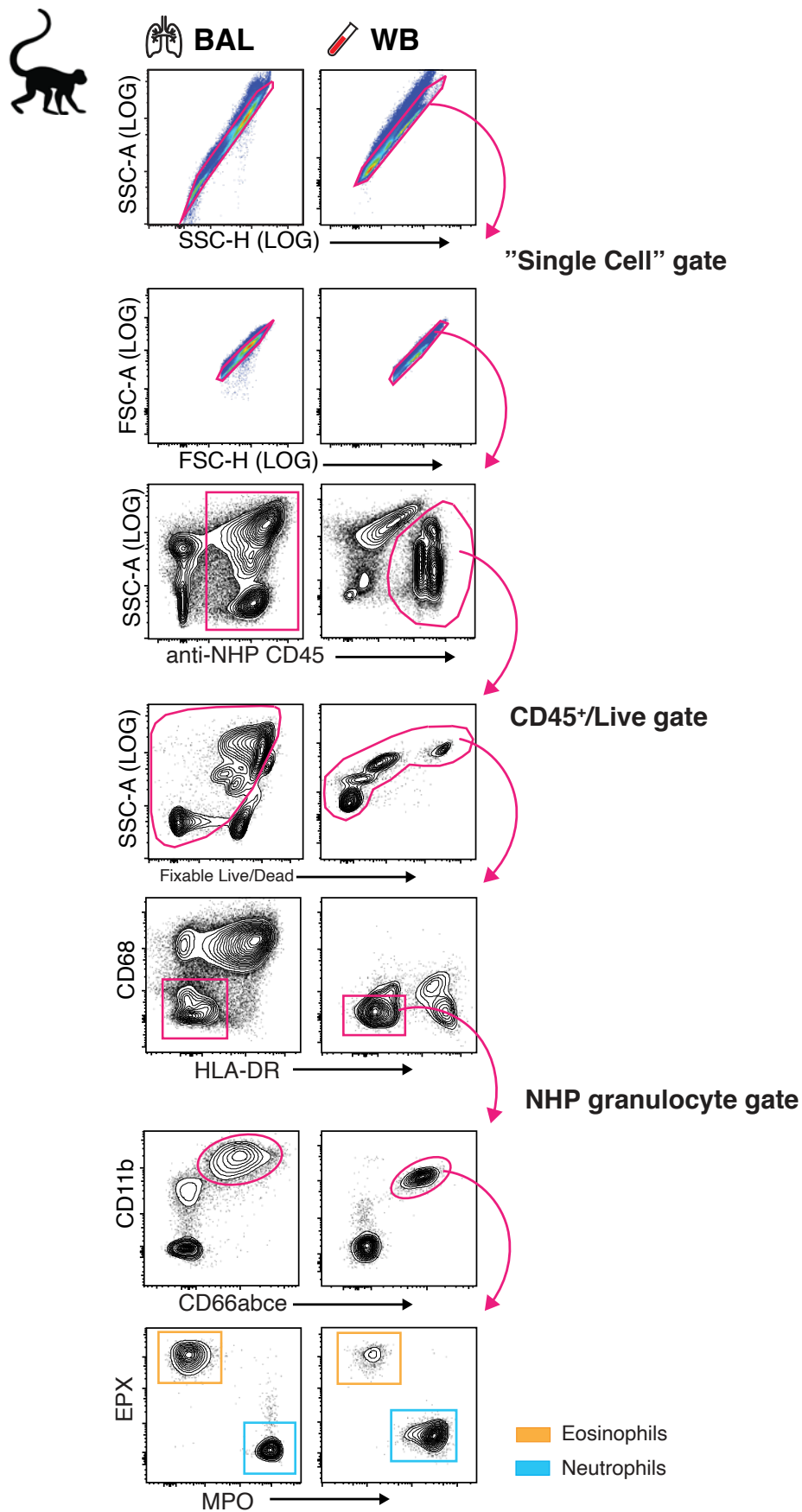
**Supplemental information**

**Rapid GPR183-mediated recruitment**

**of eosinophils to the lung after**

***Mycobacterium tuberculosis* infection**

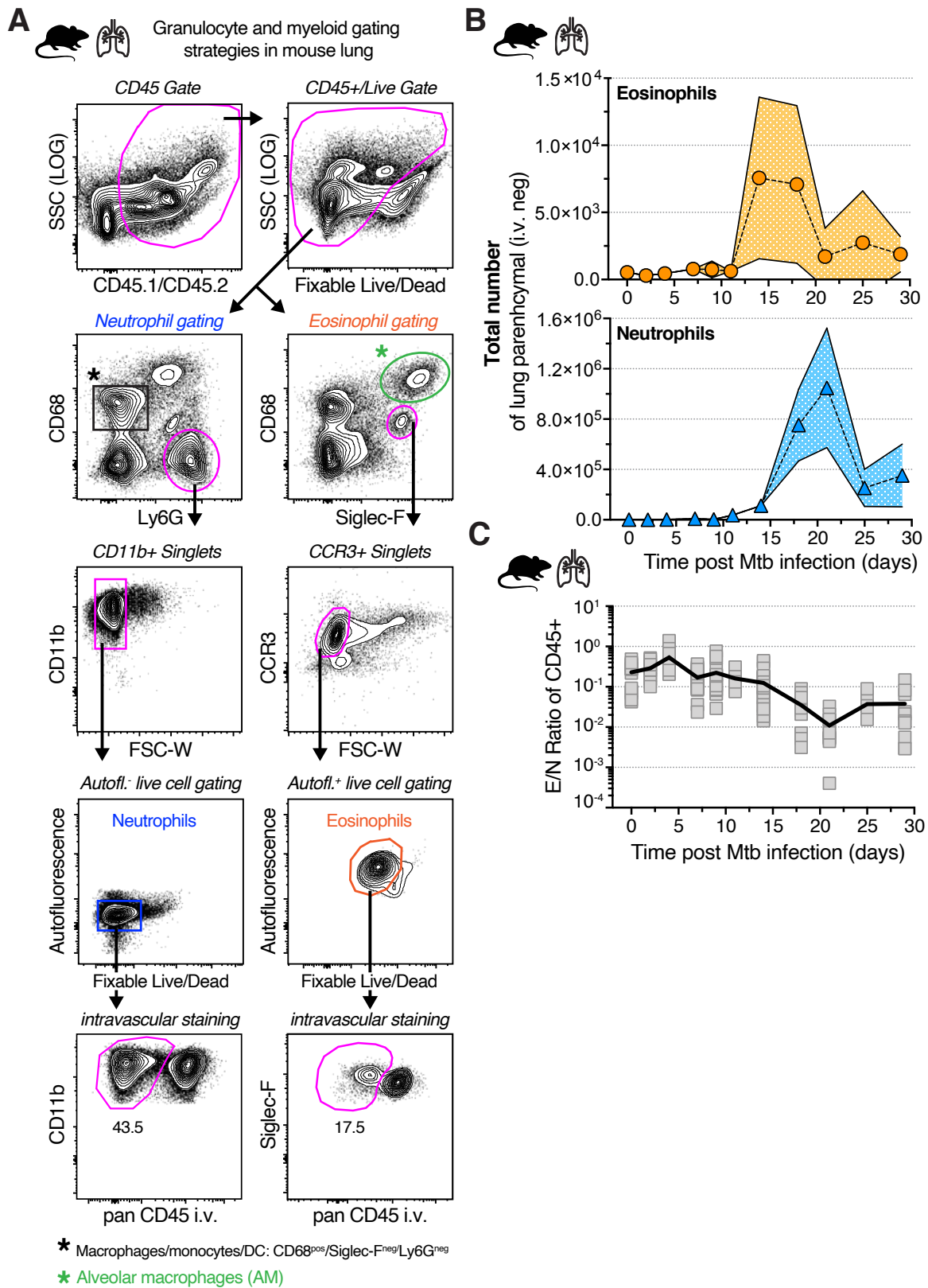
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**Eosinophil and neutrophil staining and gating strategy in rhesus macaques:**

Representative FACS plots and NHP granulocyte gating strategy in BAL and WB for rhesus macaque eosinophils (orange gate) and neutrophils (blue gate).

## Bohrer/Castro et al. Supplemental Figure S2, related to Figure 2

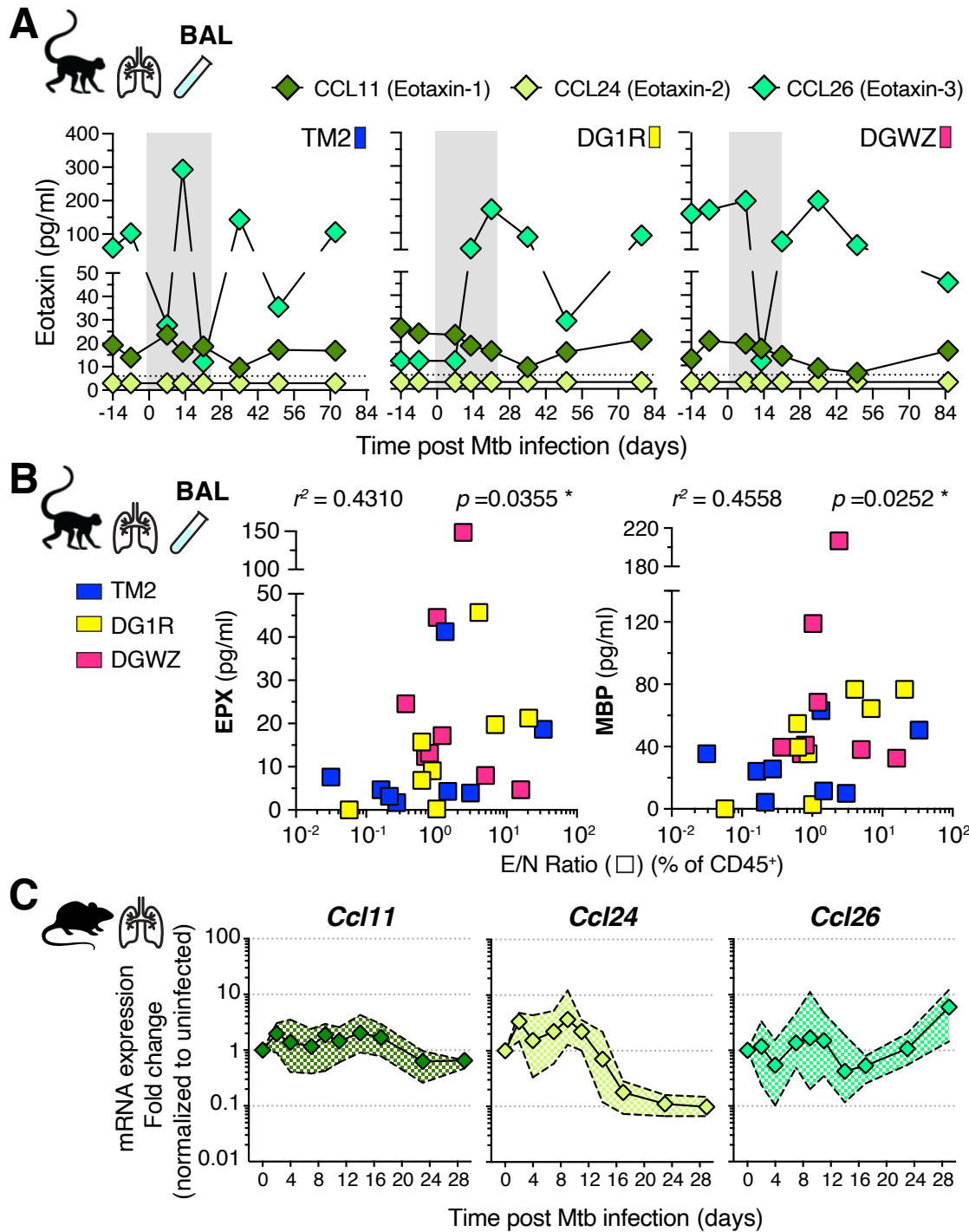


**Granulocyte and myeloid cell gating strategy and kinetics of granulocytes after Mtb infection in mice:**

**(A)** Representative FACS plots and gating strategies in WT B6 mouse lung 14 days after aerosol (100-300 CFU) infection in WT B6 mice for eosinophils (orange), neutrophils (blue), AM (green) and pan-myeloid monocytes/macrophages/DC (black)

**(B)** Total cell number of lung parenchymal (CD45 i.v. negative) eosinophils and neutrophils over time after aerosol infection in WT mice (n=6-25 per time-point, M+F, 95%CI, SEM, 2-3 experiments per time-point)

**(C)** E/N ratio in lung over course of Mtb infection in WT mice (n=6-25 per time-point, 2-3 experiments per time-point)

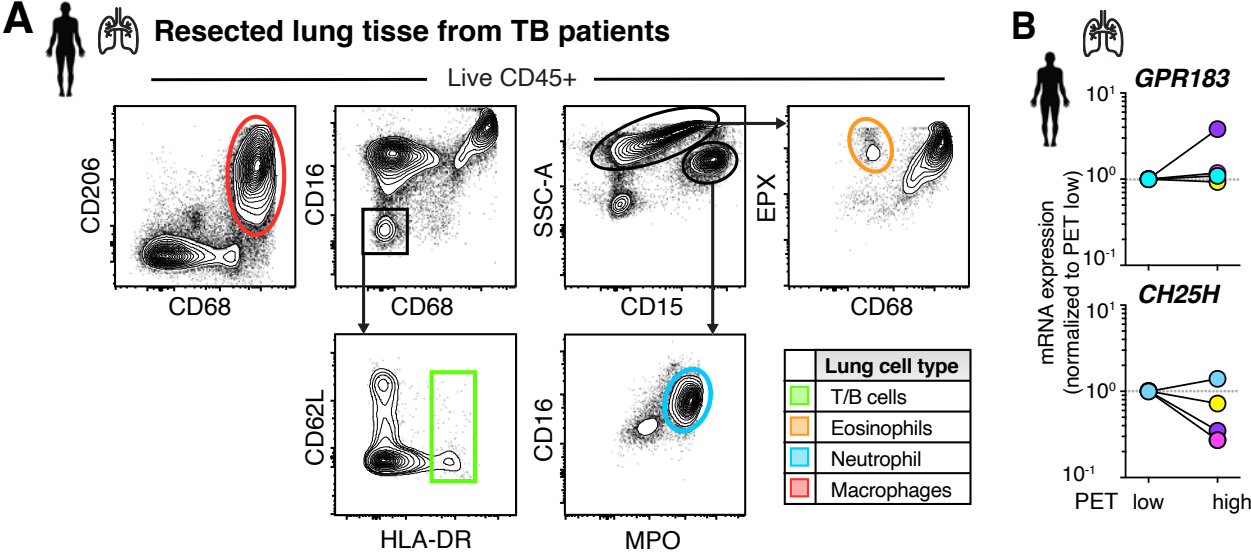


**Eotaxin levels in airways and lungs of Mtb infected rhesus macaques and mice:**

(A) Eotaxin levels in BAL of rhesus macaques over the course of Mtb infection, dotted line represents limit of detection, Eotaxin-2 (CCL24) was undetectable (n=3, d7-14 time points are highlighted in grey)

(B) EPX and MBP (major-basic-protein) levels in BAL of Mtb infected rhesus macaques (n=3) across all timepoints correlated with E/N ratio in same samples (Spearman)

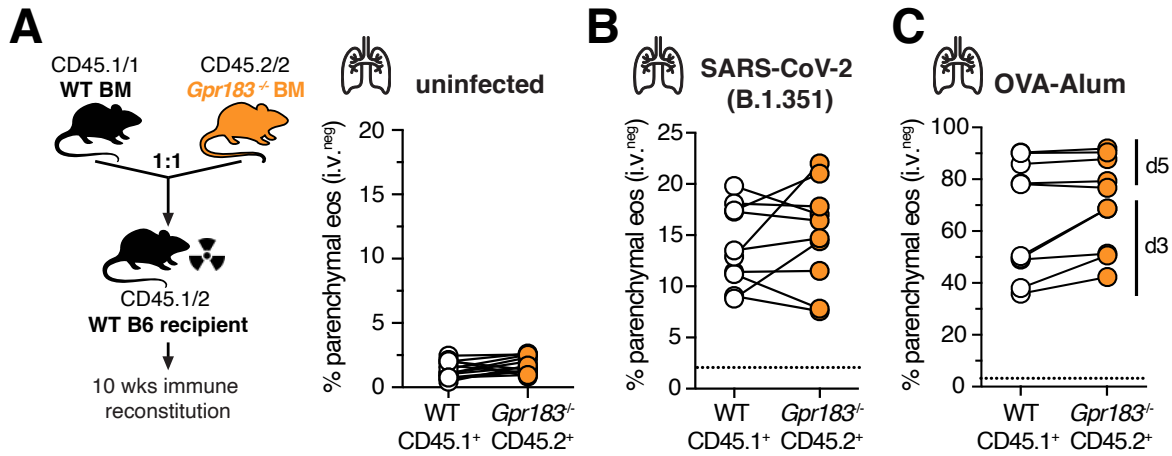
(C) Lung tissue gene expression by qRT-PCR for *Ccl11*, *Ccl24* and *Ccl26* after low dose (100-300 CFU) aerosol Mtb infection in B6 mice (n=5-12, 2 experiments)



**GPR183 expression in human TB lesion:**

- (A) Flow cytometric gating strategy of human lung TB lesions for GPR183 expression (n=5)
- (B) qRT-PCR of 18FDG PET/CT low or high signal intense human TB lung lesions for CH25H and GPR183 (n=4, Wilcoxon-matched pairs)

Bohrer/Castro et al. Supplemental Figure S5, related to Figure 6



**GPR183 expression on eosinophils is dispensable for lung migration after SARS-CoV-2 or in allergic asthma:**

- (A)** Frequency of lung parenchymal eosinophils in WT and *Gpr183*<sup>-/-</sup> competitive mixed BM chimeric mice prior to infection (M, n=13, 2 experiments)
- (B)** Quantification of CD45 i.v. negative WT or *Gpr183*<sup>-/-</sup> eosinophils from competitive mixed BM chimeric mice three to five days (F+M, n=9, 2 experiments) post intranasal SARS-CoV2 infection (B.1.351, Wilcoxon-matched pairs not significant)
- (C)** Quantification of CD45 i.v. negative WT or *Gpr183*<sup>-/-</sup> eosinophils from competitive mixed BM chimeric mice (2 experiments) after OVA-Alum immunization and three (F, n=4) or five days (M, n=5) post intranasal OVA challenge (Wilcoxon-matched pairs not significant, dotted black line shows average CD45 i.v. negative eosinophils or neutrophils in uninfected mixed BM chimeric mice)