Supplemental Figure 1. Gating strategy used for CyTOF analysis (A) and flow cytometry (B).

A

B
Supplemental Figure 2. Illustration of the expression of 42 cellular markers in 38 cell clusters in normal mouse lungs as determined by CyTOF analysis. Clusters corresponding to different leukocyte subsets are framed in red. The heatmap indicates the expression levels of the different markers.
Supplemental Figure 3. H1N1-specific antibody levels detection. (A) HI titers of the sera from WT and CXCL5−/− mice at 8 d.p.i. against H1N1 virus were evaluated (n=4). (B) Measurements of influenza-specific IgA in the BALF of WT and CXCL5−/− mice infected with the H1N1 virus at 8 d.p.i. (n = 4). The error bars represent the SDs. *P<0.05 based on Student’s t-test.
| No. | Label | Antibody | Clone     | Vender     | Target     |
|-----|-------|----------|-----------|------------|------------|
| 1   | 89Y   | CD45     | 30-F11    | BioLegend  | surface    |
| 2   | 115ln | CD3e     | 145-2C11  | BioLegend  | surface    |
| 3   | 139La | CD44     | IM7       | BioLegend  | surface    |
| 4   | 141Pr | CD24     | M1/69     | BioLegend  | surface    |
| 5   | 142Nd | MHC II   | Y-3P      | BioXcell   | surface    |
| 6   | 143Nd | CD45R[B220] | RA3-6B2  | BioLegend  | surface    |
| 7   | 144Nd | CD183[CXCR3] | CXCR3-173 | BioLegend  | surface    |
| 8   | 145Nd | CD36     | HM36      | BioLegend  | surface    |
| 9   | 146Nd | TER-119  | TER-119   | BioLegend  | surface    |
| 10  | 147Sm | Ly-6G    | IA8       | BioLegend  | surface    |
| 11  | 148Nd | Ly-6C    | HK1.4     | BioLegend  | surface    |
| 12  | 149Sm | CD172a[SIRPa] | P84     | BioLegend  | surface    |
| 13  | 150Nd | CD14     | Sa14-2    | BioLegend  | surface    |
| 14  | 151Eu | CD62L    | MEL-14    | BioLegend  | surface    |
| 15  | 152Sm | CD11c    | N418      | BioLegend  | surface    |
| 16  | 153Eu | TCRgd    | GL3       | BioLegend  | surface    |
| 17  | 154Sm | CD194[CCR4] | 2G12     | BioLegend  | surface    |
| 18  | 155Gd | CD103    | 2.00E+07  | BioLegend  | surface    |
| 19  | 156Gd | CD317[BST2] | 44E9R    | BioLegend  | surface    |
| 20  | 157Gd | CD335[NKp46] | 29A1.4   | BioLegend  | surface    |
| 21  | 158Gd | CD19     | 6D5       | BioLegend  | surface    |
| 22  | 159Tb | F4/80    | CI:A3-1   | Bio-Rad    | surface    |
| 23  | 160Gd | CD274[PD-L1] | 10F.9G2  | BioLegend  | surface    |
| 24  | 161Dy | CD64[FcyRI] | X54-5/7.1 | BioLegend  | surface    |
| 25  | 162Dy | CD206[MMR] | C068C2    | BioLegend  | intra      |
| 26  | 163Dy | CD25[IL-2R] | 3C7       | BioLegend  | surface    |
| 27  | 164Dy | RORgt    | 600214    | R&D        | intra      |
| 28  | 165Ho | CD161c[NK1.1] | PK136   | BioLegend  | surface    |
| 29  | 166Er | IL-17A   | TC11-18H101 | BioLegend  | intra      |
| 30  | 167Er | CD49b    | DX5       | BioLegend  | surface    |
| 31  | 168Er | FoxP3    | FJK-16s   | eBioscience | intra      |
| 32  | 169Tm | CD127[IL-7Ra] | A7R34    | BioLegend  | surface    |
| 33  | 170Er | T-bet    | 4B10      | BioLegend  | intra      |
| 34  | 171Yb | GATA3    | TWAJ      | eBioscience | intra      |
| 35  | 172Yb | CD182[CXCR2] | SA044G4  | BioLegend  | surface    |
| 36  | 173Yb | CD115[CSF-1R] | AFS98    | BioLegend  | surface    |
| 37  | 174Yb | IFNg     | XMG1.2    | BioXcell   | intra      |
| 38  | 175Lu | CD170[Siglec-F] | E50-2440 | BD        | surface    |
| 39  | 176Yb | IgM      | RMM-1     | BioLegend  | surface    |
| 40  | 197Au | CD4      | RM4-5     | BioLegend  | surface    |
| 41  | 198Pt | CD8a     | 53-6.7    | BioLegend  | surface    |
| 42  | 209Bi | CD11b    | M1/70     | BioLegend  | surface    |

Supplementary Table 1. The 42 antibodies used in CyTOF analysis.