Table 1. Cell types and their markers during early and late murine lung development, as identified in selected scRNA-seq datasets.

Cottle   C	Mouse	Cell							Eml	bryonic day	/ (E)									Postnata	al day (P)				Ref.
			Cell type	Identifying markers	E9/9.5	E10.5	E11.5	E12.5	E13.5	E14.5	E15.5	E16.5	E17.5	E18.5	E19.5	P0	P1	P2	Р3	P6	P7	P14	P15	P21	
Corribute   Corr			Trachea	Nkx2-1+/Sox2-																					
CSTBL6    Whole   Wh	C57BL/6.I	endoderm	Lung	Nkx2-1+/Sox2+																					(32)
Cottle_in_in_in_in_in_in_in_in_in_in_in_in_in_	00/2200	foregut-	Respiratory																						(02)
Cofficient   Cof		N/h a l a	Epithelial cells	Cldn7, Cdh1, Krt8,																					
CFRUE   Whole   Whol	C57BL/6J		derived cells	Col1a2, Fn1																					(31)
No.   No.			cells																						
C578L6   Whole large   Whole	C57BL/6			Nkx2-1																					(21)
Toells			NK	Gzma								CD45+		1% of	CD45+	CD45+	CD45+	CD45+			CD45+				
Toells   Tribc2			ILC	Rora				3% of CD45+				CD45+		1% of	CD45+	< 1% of CD45+	1% of CD45+	1% of CD45+			3% of CD45+				
DC   Fi3   State   S			T cells	Trbc2				N/A				of		1% of	CD45+		2% of CD45+								
Mast cells   Moppl, Gala2   11% of   20% of   NA   NA   NA   NA   NA   Chief   Chief			B cells	Cd79b				N/A				N/A		4% of	CD45+	2% of CD45+	6% of CD45+	9% of CD45+			8% of CD45+				
March   Marc			DC	Flt3										2% of	CD45		2% of CD45+								
Neutrophils   S100a8, Csf3r   CD45-   CD45-			Mast cells	Mcpt4, Gata2				11% of CD45+				2% of CD45+		N	/A	N/A	N/A	N/A			< 1% of CD45+				
Neutrophils   S100a8, Csf3r   CD45+   CD45+			Basophils	Mcpt8				1% of CD45+				4% of CD45+		N	/A	N/A	< 1% of CD45+	1% of CD45+			1% of CD45+				
Color			Neutrophils	S100a8, Csf3r				5% of CD45+				6% of CD45+		18% of	CD45+	37% of CD45+	14% of CD45+	36% of CD45+			8% of CD45+				
Macrophage   Cx3cr1   C52%cd   C52%cd			Monocyte					10% of CD45+				58% of CD45+		20% of	CD45+	10% of	11% of CD45+								
Macrophage			Macrophage I					52% of CD45+				3% of		N	/A			< 1% of							
Lung   Macrophage III   Coll6, Cd9   N/A   N/A   A% of CD45   C		Whole	Macrophage II	Ear2								12% of		42% of	CD45+	36% of CD45+	30% of CD45+	12% of							
Ciliated   Ccdc19, Foxj1   N/A   N/A   N/A   C1% of CD45   N/A	C57BL/6	lung	Macrophage III	Ccl6, Cd9				N/A						4% of	CD45	5% of	10% of	10% of			6% of				(33)
Club   Scg0.382			Ciliated	Ccdc19, Foxj1				N/A						< 1% o	f CD45						N/A				
AT2			Club	Scgb3a2				N/A						1% of	CD45	N/A	N/A	2% of CD45-							
Epitelium   Epcam   CD45   C			AT1	Clic5				N/A				N/A		22% of	f CD45-		16% of CD45-	22% of CD45-							
Pericyte   Gucy1a3   Gucy1a4   Gucy1a5   Guc			AT2	Sftpc				N/A				N/A		18% o	f CD45-		10% of CD45-				16% of CD45-				
Pericyte   Gucy1a3   CD45				Epcam				CD45						1% of	CD45 <sup>-</sup>	N/A	N/A	N/A			N/A				
Fibroblast   Mfap4   N/A   CD45-   6% of CD45-   CD4			Pericyte	Gucy1a3				of						1% of	CD45										
fibroblast         I groi         N/A         N/A         8% of CD45*         CD45*         CD45*         CD45*           Fibroblast progenitor         Col1a2         82% of CD45*         20% of CD45*         2% of CD45*         2% of CD45*         2% of CD45*         2% of CD45*         CD45* <td></td> <td></td> <td>fibroblast</td> <td>Mfap4</td> <td></td> <td></td> <td></td> <td>N/A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6% of</td> <td>CD45</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CD45-</td> <td></td> <td></td> <td></td> <td></td>			fibroblast	Mfap4				N/A						6% of	CD45						CD45-				
5 11 1 1 1 2 1 5 1 4 6 1 2 8 6 1 2 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4				Tgfbi				N/A				N/A		8% of	CD45	8% of CD45-	11% of CD45-	5% of CD45			12% of CD45-				
5 to 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Fibroblast	Col1a2				82% of CD45-				20% of CD45-		2% of	CD45	2% of CD45	2% of CD45-								
				Cdh5		_		4% of CD45				28% of CD45		34% of	f CD45	40% of CD45	38% of CD45	34% of CD45	_	_	48% of CD45			_	
Plexus cells Mki67, Top2a, Aplnr			Plexus cells																						
C57BL/6 Whole lung	C57BL/6		аСар																						(33, 34)
gCap Cd74, Cxcl12, Plvap, Cemip2	ĺ	lung	gCap	Cd74, Cxcl12, Plvap,																					34)

		1								,		,		 ,		
		AT1	Aqp5, Cav1, Pdpn, Ager, Vegfa												i	
		AT2	Abca3, Sftpc, Sftpb, Lyz2, Muc1, Cftr													1
C57BL/6J  Nkx2-GFP; C57BL/6J background	Whole lung	Club	Scgb1a1, Scgb3a2, Cyp2f2, Krt15													(35)
		Ciliated	FoxJ1, Itgb4, Top2a													
		Bipotential progenitor (AT1/AT2)	Sftpc, Pdpn													•
		AT1 precursor	Hopx, Ager, Cryab, H19, Tmsbp10, Cdkn1c, Igfcp5													_
		AT1	Hopx, Ager, Cryab, Clic5, Aqp5, Msln, Emp2, S100a6													
		AT2 precursor	Sftpc, Sftpb, Sftpa1, Lamp3, Clu, Cd74, Mdk, Mia, Dlk1													
		AT2	Sftpc, Sftpb, Sftpa1, Lamp3, Retnla, Lyz1, Cxcl15													
		Secretory cells														
	Nkx2 <sup>+</sup>	Multi-ciliated cells														
	lineage	Neuroendocrin e cells														(36)
	lung cells	Endothelial cells														
		Goblet like precursors														
		Proliferative cells														1
		Stress induced cells														
		Sftpc*/Hopx+					4.63%									
		Hopx*					14.15 %									
		Sftpc*					21.14 %									
		Sftpc <sup>-</sup> /Hopx <sup>-</sup>					60.08 %									
		Car4* EC	Car4, Apln, Cdh5										18% of Ecs			
		Plvap⁺ EC	Plvap, Aplnr, Cdh5										77% of ECs		1	]
		Vwf*EC	Vwf, Plvap, Gja5 (arterial), Nr2f2 (venous)													
		Lymphatic EC	Prox1, Nr2f2													
		Interstitial fibroblasts	Wnt2, Acta2													
Control mice		Airways & vascular SMC	Acta2, Pdgfrb													
	Whole	Pericyte	Pdgfrb, Acta2													
	lung (P6)/	Myofibroblast	Psgfra, Acta2													
	lung EC only	AT1	Rtkn2													(37)
	(P7)	AT2	Lamp3													
		Club&Ciliated	Sox2													
		Mesothelial	MsIn													
		B cell	Cd791													
		T & NK	Cd3e, Ncr1													
		Dentritic & IM	C1qa, Xcr1													
		Alveolar macrophage	Ear1													
		Monocyte	Ly6c2													
		Neutrophil	Ly6c2, Ly6g												1	

		Car4° EC	Car4, Apln, Cdh5			1			0% of	1	18% of					14% of			
VEGFRA- LacZ; CD1 background	Lung endothelial cells (EC)				_		-		ECs 90% of		ECs 71% of					ECs 76% of			
	endothelial	Plvap⁺ EC	Plvap, Aplnr, Cdh5 Vwf, Plvap, Gja5						ECs		ECs					ECs			(37)
	cells (EC) only	Vwf*EC	(arterial), Nr2f2 (venous)													8.3% of ECs			(37)
		Lymphatic EC	Prox1, Nr2f2													1.3% of ECs			
		Mac I	Cd68, Gal, Mki67, Mcm5, Ccr2, Pparg							75% of CD45+		0% of CD45+			0% of CD45+			0% of CD45+	
		Mac II	Cd68, Itgax, Adgrl3, Acp5																
		Mac III	Cd68, Itgax, Car4							20% of		45% of			45% of			30% of	
		Mac IV	Cd68, C1qa, Ccl12, Mrc1							CD45+		CD45+			CD45+			CD45+	
		Mac V	Cd68, Plac8																
		cDC1	Batf 3, Itgae, Irf8, Xcr1, Cadm1																
	CD45 <sup>+</sup>	cDC2	Batf 3, Cd209a, Sirpa																
C57BL/6	cells only	Mig-DC	Batf 3, Mreg, Ccl5, Ccr7							14% of		25% of			18% of			12% of CD45+	(38)
		Mast cells	Mcpt4, Tpsb2, Cma1							CD45+		CD45+		18% of CD45+	CD45+				
		Basophils	Mcpt8, II6, Hgf																
		Neutrophils	Retnlg, S100a8, S100a9, Stfa1, Stfa2																
		B cells	Ms4a1																
		T cells	Cd3e							2% of CD45+		25% of CD45+			30% of CD45+			60% of CD45+	
		NK cells	Gzma							CD43*		CD43*			CD45*			CD43*	
			Areg Sox17, Emcm, Plvap,									00.0404							
		Vas-Endo	Clec1a Prox1, Thy1, Ccl21b,									26.94%							
		Lym-Endo	ccl21a									0.47%							
		AT1	Pdpn, Aqp5, Ager, Hopx									5.04%							
		AT1/AT2	Muc1+/Pdpn+, Egfr, Shh									5.87%							
		AT2	Sftpb, Slc34a2, Abca3, Lpcat1									10.56%							
		Club	Scgb1a1, Scgb3a2, Cyp2f2, Krt15									0.52%							
		Sox2 <sup>high</sup>	Sox2, Foxj+/Krt15+, Katnal2, Hs3st6									0.59%							
		Ciliated	Foxj1, Ccdc113,									0.51%							
		Proliferative	Lrrc6 Mki67, Top2a, Hells,									0.36%							-
		lymphocyte  R lymphocyte	Ighm, Hist1h2bj Ighm, Igkc, Cd79a,									0.72%							
C57BL/6J	Whole	B lymphocyte	Cd79b, Cd19, Ms4a1 Cd3g, Cd3d, Cd7,		_		-												(39)
	lung	T lymphocyte	Trbc1, Trbc2 Fcer1a, Cd200r3,		_							0.49%							. (3.7)
		Basophils	Mcpt8, Cyp11a1									0.18%							
		Macrophage	Spi1, Tyrobp, Fcer1g, Fcgr3, Mpeg1, Emr1									6.78%							
		MatrixFB-1	Tcf21, Ent2, Fn1, Fgf10, Inmt									26.93%							
		MatrixFB-2	Col1a1, Col1a2, Agtr2, Mfap5, Sfrp2*/lgfbp5*									2.58%							
		Pericyte-1	Pdgfrb, Notch3, Map3k7cl, Mustn1, Acta2									1.25%							
		Pericyte-2	Pdgfrb, Notch3, Agtr1a, Vsnl1, Art3									2.68%							
		MyoFB-1	Agtr1a, VsnI1, Art3 Tgfbi, Pdgfra+/Acta2-				1					3.05%							
		MyoFB-2	Tgfbi, Pdgfra+/Acta2+				1					3.01%						-	
		Smooth muscle fibroblast	Tgfbi, Pdgfra /Acta2+, Actg2, Cnn1, Des									1.47%							

		Mesenchymal cells	Col1a1												
Data are from LungGENS Pdgfra- GFP: C57BL/6 background		AT1 cells	Aqp5, Hopx												
	N/A	Alveolar myofibroblasts	Acta2 <sup>high</sup> , Pdgfra, Fgf18												(40)
		Matrix fibroblasts	Tcf21, Fgf10												
		Pdgfra-high	Acta2, TagIn									43.70% of Pdgfra+		40.11% of Pdgfra+	
		Pdgfra-low (incl. lipofibroblasts)	Fgf10, Wnt2, some also Plin2									41.52% of Pdgfra+		12.97% of Pdgfra+	
	PDGFRA <sup>+</sup> cells only	Ploriferative cells	Cks2, Top2a									6.02% of Pdgfra+		N/A	(41)
		Airways Smooth Muscle cells	Lgr6									5.71% of Pdgfra+		37.93% of Pdgfra+	
		Matrix producing cells	Dcn, Col1a1, Col3a1, Col14a1		·			·				3.06% of Pdgfra+	·	9.00% of Pdgfra+	

AT1, alveolar type 2 cell; AT2, alveolar type 2 cell; DC, dendritic cell; EC, endothelial cell; FB, fibroblast; ILC, innate lymphoid cell; Lym, lymphatic; N/A, non-applicable; NK, natural killer cells; SMC, smooth muscle cell; Vas, vascular.