**LungMAP\_Human\_Anatomy\_v1.7 2019-05-13**

**LMHA\_00210 lower respiratory tract, starting ~36 weeks of human fetal gestation and continuing after birth with some variation in when the alveolar stage commences and when it is complete**

**LMHA\_00361 ┣ trachea**

LMHA\_00365 ┃ ┣ trachea lumen

LMHA\_00366 ┃ ┣ trachea wall

LMHA\_00415 ┃ ┃ ┣ tracheal mucosa

LMHA\_00288 ┃ ┃ ┃ ┣ tracheal epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00583 ┃ ┃ ┃ ┃ ┣ tracheal epithelial cell

LMHA\_00087 ┃ ┃ ┃ ┃ ┃ ┣ basal cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┣ ciliated cell

LMHA\_00143 ┃ ┃ ┃ ┃ ┃ ┣ club cell (syn: Clara cell; nonciliated secretory cell)

LMHA\_00524 ┃ ┃ ┃ ┃ ┃ ┣ intermediate airway progenitor cell

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┣ mucus cell (syn: mucous cell)

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┣ neuroendocrine cell

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┣ serous cell

LMHA\_00483 ┃ ┃ ┃ ┣ tracheal lamina propria

LMHA\_00136 ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00369 ┃ ┃ ┃ ┣ tracheal smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00416 ┃ ┃ ┣ tracheal submucosa

LMHA\_00136 ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00047 ┃ ┃ ┃ ┣ submucosal gland

LMHA\_00089 ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00351 ┃ ┃ ┃ ┃ ┣ submucosal gland epithelium

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┣ mucus cell (syn: mucous cell)

LMHA\_00242 ┃ ┃ ┃ ┃ ┃ ┣ myoepithelial cell

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┣ serous cell

LMHA\_00455 ┃ ┃ ┃ ┃ ┣ submucosal gland duct epithelium

LMHA\_00087 ┃ ┃ ┃ ┃ ┃ ┣ basal cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┣ ciliated cell

LMHA\_00146 ┃ ┃ ┃ ┃ ┃ ┣ collecting duct cell

LMHA\_00133 ┃ ┃ ┃ ┣ tracheal cartilaginous ring

LMHA\_00183 ┃ ┃ ┃ ┃ ┣ hyaline cartilage

LMHA\_00141 ┃ ┃ ┃ ┃ ┃ ┣ chondrocyte

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00370 ┃ ┃ ┃ ┃ ┣ trachealis muscle (syn: membranous trachea)

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00410 ┃ ┃ ┃ ┃ ┣ fibroelastic membrane (syn: fibroelastic connective tissue; fibroelastic tissue)

LMHA\_00412 ┃ ┃ ┃ ┃ ┣ perichondrium

LMHA\_00587 ┃ ┃ ┃ ┃ ┣ annular ligament

LMHA\_00367 ┃ ┃ ┣ tracheal adventitia

LMHA\_00055 ┃ ┃ ┃ ┣ adipose tissue

LMHA\_00054 ┃ ┃ ┃ ┃ ┣ adipocyte

LMHA\_00136 ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00362 ┃ ┣ trachea bifurcation

**LMHA\_00120 ┣ bronchus**

**LMHA\_00540 ┃ ┣ main bronchus** (syn: primary bronchus; mainstem bronchus)

LMHA\_00205 ┃ ┃ ┣ left lung main bronchus (syn: bronchus left)

LMHA\_00329 ┃ ┃ ┣ right lung main bronchus (syn: bronchus right)

**LMHA\_00538 ┃ ┣ lobar bronchus** (syn: secondary bronchus)

LMHA\_00527 ┃ ┃ ┣ left lung lobar bronchus

LMHA\_00531 ┃ ┃ ┃ ┣ left lung upper lobar bronchus

LMHA\_00528 ┃ ┃ ┃ ┣ left lung lower lobar bronchus

LMHA\_00549 ┃ ┃ ┣ right lung lobar bronchus (syn: secondary bronchus)

LMHA\_00333 ┃ ┃ ┃ ┣ right lung upper lobar

LMHA\_00331 ┃ ┃ ┃ ┣ right lung middle lobar bronchus

LMHA\_00325 ┃ ┃ ┃ ┣ right lung lower lobar bronchus

**LMHA\_00551 ┃ ┣ segmental bronchus** (syn: tertiary bronchus)

LMHA\_00530 ┃ ┃ ┣ left lung segmental bronchus (syn: tertiary bronchus)

LMHA\_00518 ┃ ┃ ┃ ┣ left apical bronchus

LMHA\_00545 ┃ ┃ ┃ ┣ left posterior bronchus

LMHA\_00516 ┃ ┃ ┃ ┣ left anterior bronchus

LMHA\_00553 ┃ ┃ ┃ ┣ superior lingular bronchus

LMHA\_00523 ┃ ┃ ┃ ┣ inferior lingular bronchus

LMHA\_00552 ┃ ┃ ┃ ┣ left lower lobe superior bronchus

LMHA\_00517 ┃ ┃ ┃ ┣ left anterior basal bronchus

LMHA\_00525 ┃ ┃ ┃ ┣ left lateral basal bronchus

LMHA\_00544 ┃ ┃ ┃ ┣ left posterior basal bronchus

LMHA\_00550 ┃ ┃ ┣ right lung segmental bronchus (syn: tertiary bronchus)

LMHA\_00616 ┃ ┃ ┃ ┣ right apical bronchus

LMHA\_00554 ┃ ┃ ┃ ┣ right upper lobe anterior bronchus

LMHA\_00620 ┃ ┃ ┃ ┣ right posterior bronchus

LMHA\_00526 ┃ ┃ ┃ ┣ lateral bronchus

LMHA\_00542 ┃ ┃ ┃ ┣ medial bronchus

LMHA\_00619 ┃ ┃ ┃ ┣ right lower lobe superior bronchus

LMHA\_00541 ┃ ┃ ┃ ┣ medial basal bronchus

LMHA\_00539 ┃ ┃ ┃ ┣ right anterior basal bronchus

LMHA\_00617 ┃ ┃ ┃ ┣ right lateral basal bronchus

LMHA\_00618 ┃ ┃ ┃ ┣ right posterior basal bronchus

**Classification scheme for each bronchus above is the same as below.**

LMHA\_00123 ┃ ┃ ┃ ┃ ┣ bronchus lumen

LMHA\_00124 ┃ ┃ ┃ ┃ ┣ bronchus wall

LMHA\_00418 ┃ ┃ ┃ ┃ ┃ ┣ bronchial mucosa

LMHA\_00101 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00577 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial epithelial cell

LMHA\_00087 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basal cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ciliated cell

LMHA\_00524 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ intermediate airway progenitor cell

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroendocrine cell

LMHA\_00253 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroepithelial body

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroendocrine cell

LMHA\_00143 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ club cell (syn: Clara cell; nonciliated secretory cell; bronchiolar exocrine cell)

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ mucus cell (syn: mucous cell)

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ serous cell

LMHA\_00590 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial lamina propria (syn: bronchial connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00103 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00419 ┃ ┃ ┃ ┃ ┃ ┣ bronchial submucosa

LMHA\_00047 ┃ ┃ ┃ ┃ ┃ ┃ ┣ submucosal gland

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00351 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ submucosal gland epithelium

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ mucus cell (syn: mucous cell)

LMHA\_00242 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ myoepithelial cell

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ serous cell

LMHA\_00455 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ submucosal gland duct epithelium

LMHA\_00087 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basal cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ciliated cell

LMHA\_00146 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collecting duct cell

LMHA\_00595 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial cartilaginous ring (syn: cartilage ring; cartilaginous ring; cartilage)

LMHA\_00103 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchial smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00183 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ hyaline cartilage

LMHA\_00141 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ chondrocyte

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00410 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ fibroelastic membrane (syn: fibroelastic connective tissue; fibroelastic tissue)

LMHA\_00412 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ perichondrium

LMHA\_00587 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ annular ligament

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00094 ┃ ┃ ┃ ┃ ┃ ┣ bronchial adventitia

LMHA\_00055 ┃ ┃ ┃ ┃ ┃ ┃ ┣ adipose tissue

LMHA\_00054 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ adipocyte

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**Note: The classification scheme for the right upper and middle lobes and for the left upper and lower lobes is the same as for the right lower lobe below.**

**LMHA\_00211 ┣ lung**

**LMHA\_00199 ┃ ┣ left lung**

LMHA\_00532 ┃ ┃ ┣ left lung upper lobe (syn: left superior lobe)

LMHA\_00529 ┃ ┃ ┣ left lung lower lobe (syn: left inferior lobe)

**LMHA\_00326 ┃ ┣ right lung**

LMHA\_00332 ┃ ┃ ┣ right lung upper lobe (syn: right superior lobe)

LMHA\_00330 ┃ ┃ ┣ right lung middle lobe (syn: right middle lobe)

LMHA\_00324 ┃ ┃ ┣ right lung lower lobe (syn: right inferior lobe)

LMHA\_00021 ┃ ┃ ┃ ┣ right lower lobe bronchiole

**LMHA\_00578 ┃ ┃ ┃ ┃ ┣ membranous bronchiole**

LMHA\_00579 ┃ ┃ ┃ ┃ ┃ ┣ membranous bronchiolar lumen

LMHA\_00580 ┃ ┃ ┃ ┃ ┃ ┣ membranous bronchiolar wall

LMHA\_00581 ┃ ┃ ┃ ┃ ┃ ┃ ┣ membranous bronchiolar epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00630 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ membranous bronchiolar epithelial cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ ciliated cell

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ neuroendocrine cell

LMHA\_00253 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ neuroepithelial body

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ neuroendocrine cell

LMHA\_00143 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ club cell (syn: Clara cell; nonciliated secretory cell; bronchiolar exocrine cell)

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ mucus cell (syn: mucous cell)

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃┣ serous cell

LMHA\_00589 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar lamina propria

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00240 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar smooth muscle (syn: peribronchiolar smooth muscle)

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00114 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar adventitia

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00359 ┃ ┃ ┃ ┃ ┣ terminal bronchiole**

LMHA\_00357 ┃ ┃ ┃ ┃ ┃ ┣ terminal bronchiolar lumen

LMHA\_00358 ┃ ┃ ┃ ┃ ┃ ┣ terminal bronchiolar wall

LMHA\_00457 ┃ ┃ ┃ ┃ ┃ ┃ ┣ terminal bronchiolar epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00582 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ terminal bronchiolar epithelial cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ ciliated cell

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ neuroendocrine cell

LMHA\_00253 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ neuroepithelial body

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┃ ┣ neuroendocrine cell

LMHA\_00143 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ club cell (syn: Clara cell; nonciliated secretory cell; bronchiolar exocrine cell)

LMHA\_00238 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ mucus cell (syn: mucous cell)

LMHA\_00340 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ serous cell

LMHA\_00589 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar lamina propria

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00240 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar smooth muscle (syn: peribronchiolar smooth muscle)

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00114 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar adventitia

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00140 ┃ ┃ ┃ ┃ ┣ respiratory bronchiole**

LMHA\_00138 ┃ ┃ ┃ ┃ ┃ ┣ respiratory bronchiolar lumen

LMHA\_00139 ┃ ┃ ┃ ┃ ┃ ┣ respiratory bronchiolar wall

LMHA\_00286 ┃ ┃ ┃ ┃ ┃ ┃ ┣ respiratory bronchiolar epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00629 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ respiratory bronchiolar epithelial cell

LMHA\_00142 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ ciliated cell

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ neuroendocrine cell

LMHA\_00253 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ neuroepithelial body

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┃┣ neuroendocrine cell

LMHA\_00143 ┃ ┃ ┃ ┃ ┃ ┃ ┃┃ ┣ club cell (syn: Clara cell; nonciliated secretory cell; bronchiolar exocrine cell)

LMHA\_00589 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar lamina propria

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00240 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar smooth muscle (syn: peribronchiolar smooth muscle)

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00114 ┃ ┃ ┃ ┃ ┃ ┃ ┣ bronchiolar adventitia

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00563 ┃ ┃ ┃ ┃ ┃ ┣ respiratory bronchiolar alveolus**

**Note: the classification scheme for the “respiratory bronchiolar alveolus” is the same as for the “alveolus” below.**

**LMHA\_00020 ┃ ┃ ┃ ┣ right lower lobe alveolar parenchyma**

**LMHA\_00062 ┃ ┃ ┃ ┃ ┣ alveolar duct**

LMHA\_00063 ┃ ┃ ┃ ┃ ┃ ┣ alveolar duct lumen

LMHA\_00215 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pulmonary surfactant (syn: lung surfactant)

LMHA\_00226 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar macrophage

LMHA\_00064 ┃ ┃ ┃ ┃ ┃ ┣ alveolar duct wall

LMHA\_00555 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00586 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar epithelial cell

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroendocrine cell

LMHA\_00253 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroepithelial body

LMHA\_00252 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ neuroendocrine cell

LMHA\_00379 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ type I pneumocyte (syn: AT1 cell, alveolar type I epithelial cell; AEC1)

LMHA\_00381 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ type II pneumocyte (syn: AT2 cell, alveolar type II epithelial cell; AEC2)

LMHA\_00060 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar capillary bed (syn: alveolar capillary network)

LMHA\_00061 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar capillary endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00067 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar interstitial tissue (syn: alveolar stroma; alveolar connective tissue)

LMHA\_00066 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar interstitial cell (syn: alveolar stromal cell; alveolar connective tissue cell)

LMHA\_00209 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ lipofibroblast

LMHA\_00007 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ matrix fibroblast

LMHA\_00243 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ myofibroblast

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00609 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proliferative endothelial cell

LMHA\_00608 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proliferative epithelial cell

LMHA\_00244 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proliferative myofibroblast

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00072 ┃ ┃ ┃ ┃ ┣ alveolus**

LMHA\_00068 ┃ ┃ ┃ ┃ ┃ ┣ alveolar lumen

LMHA\_00215 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pulmonary surfactant (syn: lung surfactant)

LMHA\_00226 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar macrophage

**LMHA\_00002 ┃ ┃ ┃ ┃ ┃ ┣ alveolar septum**

**LMHA\_00279 ┃ ┃ ┃ ┃ ┃ ┃ ┣ primary alveolar septum (syn: primary septum)**

**LMHA\_00071 ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar septal crest (syn: alveolar septal ridge, secondary septal crest)**

**LMHA\_00339 ┃ ┃ ┃ ┃ ┃ ┃ ┣ secondary alveolar septum**

**Note: the classification scheme for “primary alveolar septum”, “alveolar septal crest”, and “secondary alveolar septum” is the same as below.**

LMHA\_00065 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar epithelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00585 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar epithelial cell

LMHA\_00379 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ type I pneumocyte (syn: alveolar epithelial cell, type I; AT1 cell)

LMHA\_00381 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ type II pneumocyte (syn: alveolar epithelial cell, type II; AT2 cell)

LMHA\_00060 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar capillary bed (syn: alveolar capillary network)

LMHA\_00061 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar capillary endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00067 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar interstitial tissue (syn: alveolar interstitium; alveolar stroma)

LMHA\_00066 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ alveolar interstitial cell (syn: alveolar mesenchymal cell; alveolar stromal cell)

LMHA\_00007 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ matrix fibroblast (syn: matrix synthesizing fibroblast)

LMHA\_00209 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ lipofibroblast

LMHA\_00243 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ myofibroblast

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00564 ┃ ┃ ┃ ┣ right lower lobe interlobular septum**

LMHA\_00136 ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00028 ┃ ┃ ┃ ┣ right lower lobe visceral pleura**

LMHA\_00405 ┃ ┃ ┃ ┃ ┣ visceral connective tissue

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00406 ┃ ┃ ┃ ┃ ┣ visceral mesothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00231 ┃ ┃ ┃ ┃ ┃ ┣ mesothelial cell

**LMHA\_00546 ┣ respiratory autonomic nervous system OR autonomic respiratory nervous system**

LMHA\_00633 ┃ ┣ pulmonary nerve plexus

LMHA\_00 635 ┃ ┃ ┣ left pulmonary nerve plexus

LMHA\_00 636 ┃ ┃ ┃ ┣ left anterior pulmonary nerve plexus

LMHA\_00 637 ┃ ┃ ┃ ┣ left posterior pulmonary nerve plexus

LMHA\_00 638 ┃ ┃ ┣ right pulmonary nerve plexus

LMHA\_00 639 ┃ ┃ ┃ ┣ right anterior pulmonary nerve plexus

LMHA\_00 640 ┃ ┃ ┃ ┣ right posterior pulmonary nerve plexus

LMHA\_00 634 ┃ ┣ pulmonary autonomic ganglion (syn: nerve cell cluster)

LMHA\_00 521 ┃ ┃ ┣ autonomic neuron (syn: autonomic ganglion cell)

LMHA\_00 338 ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00641 ┃ ┣ pulmonary autonomic nerve

LMHA\_00257 ┃ ┃ ┣ non-adrenergic and non-cholinergic nerve

LMHA\_00247 ┃ ┃ ┃ ┣ nerve fiber

LMHA\_00338 ┃ ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00642 ┃ ┃ ┣ preganglionic parasympathetic nerve

LMHA\_00247 ┃ ┃ ┃ ┣ nerve fiber

LMHA\_00338 ┃ ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00270 ┃ ┃ ┣ postganglionic parasympathetic nerve (syn: cholinergic innervation)

LMHA\_00247 ┃ ┃ ┃ ┣ nerve fiber

LMHA\_00338 ┃ ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00352 ┃ ┃ ┣ postganglionic sympathetic nerve (syn: adrenergic innervation)

LMHA\_00247 ┃ ┃ ┃ ┣ nerve fiber

LMHA\_00338 ┃ ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00 643 ┃ ┣ general visceral nervous system

LMHA\_00 644 ┃ ┃ ┣ general visceral afferent nerve (syn: sensory nerve)

LMHA\_00247 ┃ ┃ ┃ ┣ nerve fiber

LMHA\_00338 ┃ ┃ ┃ ┣ glial cell (syn: Schwann cell; neuroglial cell)

LMHA\_00645 ┃ ┃ ┃ ┣ visceral afferent sensory nerve terminal (syn: visceral afferent sensory nerve receptor)

**LMHA\_00547 ┣ respiratory immune system**

LMHA\_00185 ┃ ┣ Immune cell (syn: leukocyte; white blood cell)

LMHA\_00150 ┃ ┃ ┣ dendritic cell

LMHA\_00558 ┃ ┃ ┃ ┣ Langerhans cell

LMHA\_00241 ┃ ┃ ┣ myeloid cell

LMHA\_00179 ┃ ┃ ┃ ┣ granulocyte

LMHA\_00090 ┃ ┃ ┃ ┃ ┣ basophil (syn: basophilic leukocyte; basophilic granulocyte)

LMHA\_00163 ┃ ┃ ┃ ┃ ┣ eosinophil

LMHA\_00256 ┃ ┃ ┃ ┃ ┣ neutrophil

LMHA\_00182 ┃ ┃ ┃ ┣ macrophage (syn: histiocyte)

LMHA\_00226 ┃ ┃ ┃ ┃ ┣ alveolar macrophage

LMHA\_00213 ┃ ┃ ┃ ┃ ┣ interstitial macrophage (syn: lung tissue macrophage; pulmonary interstitial macrophage)

LMHA\_00681 ┃ ┃ ┃ ┃ ┣ lymph node macrophage

LMHA\_00615 ┃ ┃ ┃ ┃ ┣ tingible body macrophage

LMHA\_00613 ┃ ┃ ┃ ┣ megakaryocyte

LMHA\_00668 ┃ ┃ ┃ ┃ ┣ platelet

LMHA\_00233 ┃ ┃ ┃ ┣ monocyte

LMHA\_00614 ┃ ┃ ┣ lymphoid cell

LMHA\_00223 ┃ ┃ ┃ ┣ lymphocyte

LMHA\_00086 ┃ ┃ ┃ ┃ ┣ B lymphocyte (syn: B cell)

LMHA\_00574 ┃ ┃ ┃ ┃ ┃ ┣ plasma cell (syn: mature B lymphocyte)

LMHA\_00354 ┃ ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00623 ┃ ┃ ┃ ┃ ┣ innate lymphoid cell

LMHA\_00245 ┃ ┃ ┃ ┃ ┃ ┣ natural killer cell (syn: non-T, non-B lymphocyte; large granular lymphocyte)

LMHA\_00437 ┃ ┃ ┃ ┃ ┃ ┣ nuocyte

LMHA\_00626 ┃ ┣ lymphoid tissue

LMHA\_00651 ┃ ┃ ┣Bronchus-associated lymphoid tissue (syn:  BALT)

LMHA\_00086 ┃ ┃ ┃ ┣ B lymphocyte (syn: B cell)

LMHA\_00574 ┃ ┃ ┃ ┃ ┣plasma cell (syn: mature B lymphocyte)

LMHA\_00354 ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00224 ┃ ┃ ┣Lymph node (paratracheal and hilar)

LMHA\_00678    ┃ ┃ ┃ ┣ connective tissue capsule

LMHA\_00679     ┃ ┃ ┃ ┃ ┣ trabecula

LMHA\_00680    ┃ ┃ ┃ ┣ cortex

LMHA\_00567 ┃ ┃ ┃ ┃ ┣ lymphoid follicle

LMHA\_00570 ┃ ┃ ┃ ┃ ┃ ┣ germinal center (syn: central zone of follicle; reactive center of follicle)

LMHA\_00086 ┃ ┃ ┃ ┃ ┃ ┃ ┣ B lymphocyte (syn: B lymphocyte; B cell)

LMHA\_00354 ┃ ┃ ┃ ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00571 ┃ ┃ ┃ ┃ ┃ ┃ ┣ centroblast (syn: large non-cleaved follicle center cell)

LMHA\_00150 ┃ ┃ ┃ ┃ ┃ ┃ ┣ dendritic cell

LMHA\_00558 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ Langerhans cell

LMHA\_00575 ┃ ┃ ┃ ┃ ┃ ┃ ┣ immunoblast

LMHA\_00574 ┃ ┃ ┃ ┃ ┃ ┃ ┣ plasma cell (syn: mature B lymphocyte)

LMHA\_00615 ┃ ┃ ┃ ┃ ┃ ┃ ┣ tingible body macrophage

LMHA\_00569 ┃ ┃ ┃ ┃ ┃ ┣ mantle zone

LMHA\_00086 ┃ ┃ ┃ ┃ ┃ ┃ ┣ B lymphocyte (syn: B cell)

LMHA\_00574 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ plasma cell (syn: mature B lymphocyte)

LMHA\_00354 ┃ ┃ ┃ ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00573 ┃ ┃ ┃ ┃ ┃ ┣ marginal zone

LMHA\_00086 ┃ ┃ ┃ ┃ ┃ ┃ ┣ B lymphocyte (syn: B cell)

LMHA\_00574 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ plasma cell (syn: mature B lymphocyte)

LMHA\_00354 ┃ ┃ ┃ ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00686    ┃ ┃ ┃ ┣ endothelial sinus

LMHA\_00687    ┃ ┃ ┃ ┃ ┣ cortical sinus

LMHA\_00688    ┃ ┃ ┃ ┃ ┣ medullary sinus

LMHA\_00689    ┃ ┃ ┃ ┃ ┣ paratrabecular sinus (syn: trabecular sinus)

LMHA\_00690 ┃ ┃ ┃ ┃ ┣ subcapsular sinus

LMHA\_00682    ┃ ┃ ┃ ┣ medulla

LMHA\_00683    ┃ ┃ ┃ ┃ ┣ medullary cord

LMHA\_00086    ┃ ┃ ┃ ┃ ┃ ┣ B Lymphocyte (syn: B cell)

LMHA\_00574    ┃ ┃ ┃ ┃ ┃ ┃ ┣ plasma cell (syn: mature B lymphocyte)

LMHA\_00681    ┃ ┃ ┃ ┃ ┃ ┣ lymph node macrophage

LMHA\_00568 ┃ ┃ ┃ ┣ paracortex

LMHA\_00086 ┃ ┃ ┃ ┃ ┃ ┣ B lymphocyte (syn: B cell)

LMHA\_00574 ┃ ┃ ┃ ┃ ┃ ┃ ┣plasma cell (syn: mature B lymphocyte)

LMHA\_00150 ┃ ┃ ┃ ┃ ┃ ┣ dendritic cell

LMHA\_00558 ┃ ┃ ┃ ┃ ┃ ┃ ┣ Langerhans cell

LMHA\_00354 ┃ ┃ ┃ ┃ ┃ ┣ T lymphocyte (syn: T cell)

LMHA\_00685 ┃ ┃ ┃ ┃ ┃ ┣ reticular cell

**LMHA\_00548 ┣ respiratory vascular system** (syn: respiratory vasculature)

**LMHA\_00692 ┃ ┣ blood cell**

LMHA\_00622 ┃ ┃ ┣ erythrocyte

LMHA\_00179 ┃ ┃ ┣ granulocyte

LMHA\_00090 ┃ ┃ ┃ ┣ basophil (syn: basophilic leukocyte; basophilic granulocyte)

LMHA\_00163 ┃ ┃ ┃ ┣ eosinophil

LMHA\_00256 ┃ ┃ ┃ ┣ neutrophil

LMHA\_00233 ┃ ┃ ┣ monocyte

LMHA\_00819 ┃ ┃ ┣ peripheral blood lymphocyte

**LMHA\_00104 ┃ ┣ bronchial blood vessel**

**LMHA\_00098 ┃ ┃ ┣bronchial artery**

**LMHA\_00095 ┃ ┃ ┣ bronchial arteriole**

**LMHA\_00105 ┃ ┃ ┣ bronchial vein**

**LMHA\_00109 ┃ ┃ ┣ bronchial venule**

**Note: the classification scheme for “bronchial blood vessel” is as follows:**

* **“bronchial artery” is analogous to “pulmonary muscular artery”**
* **“bronchial arteriole” is analogous to “pulmonary distal arteriole”**
* **“bronchial vein” is analogous to “pulmonary vein” but does not include the “vasa vasorum”**
* **“bronchial venule” is analogous to “pulmonary distal venule”**

**LMHA\_00315 ┃ ┣ pulmonary blood vessel**

**LMHA\_00632 ┃ ┃ ┣ intra-parenchymal blood vessel**

**LMHA\_00291 ┃ ┃ ┣ pulmonary artery**

LMHA\_00293 ┃ ┃ ┃ ┣ pulmonary artery tunica intima

LMHA\_00081 ┃ ┃ ┃ ┃ ┣ artery endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00191 ┃ ┃ ┃ ┃ ┣ internal elastic membrane

LMHA\_00378 ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00294 ┃ ┃ ┃ ┣ pulmonary artery tunica media

LMHA\_00167 ┃ ┃ ┃ ┃ ┣ external elastic membrane

LMHA\_00393 ┃ ┃ ┃ ┃ ┣ vascular smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00292 ┃ ┃ ┃ ┣ pulmonary artery tunica adventitia

LMHA\_00395 ┃ ┃ ┃ ┃ ┣ vasa vasorum

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00290 ┃ ┃ ┣ pulmonary arteriole**

**LMHA\_00304 ┃ ┃ ┃ ┣ pulmonary muscular arteriole**

LMHA\_00488 ┃ ┃ ┃ ┃ ┣ pulmonary muscular arteriole tunica intima

LMHA\_00078 ┃ ┃ ┃ ┃ ┃ ┣ arteriole endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00191 ┃ ┃ ┃ ┃ ┃ ┣ internal elastic membrane

LMHA\_00378 ┃ ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00489 ┃ ┃ ┃ ┃ ┣ pulmonary muscular arteriole tunica media

LMHA\_00167 ┃ ┃ ┃ ┃ ┃ ┣ external elastic membrane

LMHA\_00393 ┃ ┃ ┃ ┃ ┃ ┣ vascular smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00486 ┃ ┃ ┃ ┃ ┣ pulmonary arteriole tunica adventitia

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00297 ┃ ┃ ┃ ┣ pulmonary distal arteriole** (syn: pulmonary terminal arteriole)

LMHA\_00299 ┃ ┃ ┃ ┃ ┣ pulmonary distal arteriole tunica intima

LMHA\_00078 ┃ ┃ ┃ ┃ ┃ ┣ arteriole endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00378 ┃ ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber (syn: elastic fiber)

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00300 ┃ ┃ ┃ ┃ ┣ pulmonary distal arteriole tunica media

LMHA\_00393 ┃ ┃ ┃ ┃ ┃ ┣ vascular smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00298 ┃ ┃ ┃ ┃ ┣ pulmonary distal arteriole tunica adventitia

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue (syn: perivascular connective tissue)

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00305 ┃ ┃ ┣ pulmonary vein**

LMHA\_00307 ┃ ┃ ┃ ┣ pulmonary vein tunica intima

LMHA\_00191 ┃ ┃ ┃ ┃ ┣ internal elastic membrane

LMHA\_00378 ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00397 ┃ ┃ ┃ ┃ ┣ vein endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00308 ┃ ┃ ┃ ┣ pulmonary vein tunica media

LMHA\_00393 ┃ ┃ ┃ ┃ ┣ vascular smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00306 ┃ ┃ ┃ ┣ pulmonary vein tunica adventitia

LMHA\_00395 ┃ ┃ ┃ ┃ ┣ vasa vasorum

LMHA\_00440 ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00316 ┃ ┃ ┣ pulmonary venule**

**LMHA\_00309 ┃ ┃ ┃ ┣ pulmonary muscular venule**

LMHA\_00311 ┃ ┃ ┃ ┃ ┣ pulmonary muscular venule tunica intima

LMHA\_00191 ┃ ┃ ┃ ┃ ┃ ┣ internal elastic membrane

LMHA\_00378 ┃ ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00403 ┃ ┃ ┃ ┃ ┃ ┣ venule endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00312 ┃ ┃ ┃ ┃ ┣ pulmonary muscular venule tunica media

LMHA\_00393 ┃ ┃ ┃ ┃ ┃ ┣ vascular smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00310 ┃ ┃ ┃ ┃ ┣ pulmonary muscular venule tunica adventitia

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00301 ┃ ┃ ┃ ┣ pulmonary distal venule**

LMHA\_00303 ┃ ┃ ┃ ┃ ┣ pulmonary distal venule tunica intima

LMHA\_00378 ┃ ┃ ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00403 ┃ ┃ ┃ ┃ ┃ ┣ venule endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00392 ┃ ┃ ┃ ┃ ┃ ┃ ┣ vascular endothelial cell

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00302 ┃ ┃ ┃ ┃ ┣ pulmonary distal venule tunica adventitia

LMHA\_00440 ┃ ┃ ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

**LMHA\_00447 ┃ ┣ pulmonary lymphatic vessel**

LMHA\_00221 ┃ ┃ ┣ lymphatic vessel tunica intima

LMHA\_00378 ┃ ┃ ┃ ┣ subendothelial connective tissue cell

LMHA\_00273 ┃ ┃ ┃ ┃ ┣ pericyte

LMHA\_00356 ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00422 ┃ ┃ ┃ ┣ lymphatic endothelium

LMHA\_00089 ┃ ┃ ┃ ┃ ┣ basement membrane

LMHA\_00216 ┃ ┃ ┃ ┃ ┣ lymphatic endothelial cell

LMHA\_00440 ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00222 ┃ ┃ ┣ lymphatic vessel tunica media

LMHA\_00217 ┃ ┃ ┃ ┣ lymphatic smooth muscle

LMHA\_00343 ┃ ┃ ┃ ┃ ┣ smooth muscle cell

LMHA\_00440 ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber

LMHA\_00220 ┃ ┃ ┣ lymphatic vessel tunica adventitia

LMHA\_00440 ┃ ┃ ┃ ┣ vascular connective tissue

LMHA\_00136 ┃ ┃ ┃ ┃ ┣ connective tissue cell

LMHA\_00356 ┃ ┃ ┃ ┃ ┃ ┣ telocyte

LMHA\_00386 ┃ ┃ ┃ ┃ ┃ ┣ unclassified fibroblast

LMHA\_00168 ┃ ┃ ┃ ┃ ┣ extracellular matrix

LMHA\_00145 ┃ ┃ ┃ ┃ ┃ ┣ collagen fiber

LMHA\_00158 ┃ ┃ ┃ ┃ ┃ ┣ elastic fiber

LMHA\_00180 ┃ ┃ ┃ ┃ ┃ ┣ ground substance

LMHA\_00178 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycoprotein

LMHA\_00283 ┃ ┃ ┃ ┃ ┃ ┃ ┣ proteoglycan

LMHA\_00576 ┃ ┃ ┃ ┃ ┃ ┃ ┣ glycosaminoglycan

LMHA\_00320 ┃ ┃ ┃ ┃ ┃ ┣ reticular fiber