

CapyBio Human Cell Identity Reference Menu

April 2026

All references derived from: The Tabula Sapiens Consortium. The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans. Science 376 (2022) and Tabula Sapiens reveals transcription factor expression, senescence effects, and sex-specific features in cell types from 28 human organs and tissues. Biorxiv (2025).

Every project is different. If none of the available references fit your analysis or you need more information about any of the references below, our team is here to help. Get in touch at info@capybio.com.

Bladder

Includes bladder urothelial cells, fibroblasts, smooth muscle cells, myofibroblasts, pericytes, capillary and venous endothelial cells, lymphatic endothelial cells, and immune cells including erythrocytes, macrophages, monocytes, mast cells, neutrophils, CD4+ and CD8+ T cells, T cells, B cells, plasma cells, natural killer cells, and mature NK T cells.

Blood

Includes erythrocytes, platelets, hematopoietic precursor cells, monocytes, classical, intermediate, and non-classical monocytes, CD4+ and CD8+ T cells, naive CD4+ T cells, B cells, plasma cells, natural killer cells, mature NK T cells, macrophages, and neutrophils.

Bone Marrow

Includes hematopoietic stem cells, common myeloid progenitors, erythroid progenitor cells, hematopoietic precursor cells, granulocytes, erythrocytes, monocytes, classical and intermediate monocytes, CD4+ and CD8+ T cells, T cells, B cells, plasma cells, natural killer cells, macrophages, myeloid dendritic cells, and neutrophils.

Ear

Includes stromal cells, pericytes, melanocytes, supporting cells of the vestibular epithelium, hematopoietic cells, vascular endothelial cells, vascular smooth muscle cells, and macrophages.

Eye

Includes conjunctival and corneal epithelial cells, keratocytes, photoreceptors, Müller cells, microglial cells, Schwann cells, acinar cells, muscle cells, retinal blood vessel endothelial cells, smooth muscle cells, fibroblasts, erythrocytes, and immune cells including macrophages, monocytes, myeloid leukocytes, CD4+ and CD8+ T cells, B cells, plasma cells, and mature NK T cells.

Fat (Adipose)

Includes mesenchymal stem cells of adipose tissue, fibroblasts, smooth muscle cells, myofibroblasts, pericytes, muscle cells, endothelial cells, erythrocytes, hematopoietic precursor cells, and immune cells including macrophages, monocytes, neutrophils, mast cells, CD4+ and CD8+ T cells, B cells, plasma cells, natural killer cells, and mature NK T cells.

Heart

Includes atrial and ventricular cardiomyocytes, cardiac fibroblasts, cardiac endothelial cells, smooth muscle cells, pericytes, mesothelial cells, neurons, erythrocytes, and immune cells including macrophages, monocytes, neutrophils, CD8+ T cells, and natural killer cells.

Kidney

Includes kidney epithelial cells, endothelial cells, and immune cells including macrophages, CD4+ and CD8+ T cells, B cells, and natural killer cells.

Large Intestine

Includes enterocytes, BEST4+ enterocytes, large intestine goblet cells, intestinal crypt stem cells of the colon, transit amplifying cells, tuft cells, enterogial cells, fibroblasts, colon endothelial cells, and immune cells including CD4+ and CD8+ T cells, naive CD4+ T cells, regulatory T cells, gamma-delta T cells, B cells, plasma cells, mast cells, colon macrophages, and myeloid leukocytes.

Liver

Includes hepatocytes, intrahepatic cholangiocytes, hepatic stellate cells, endothelial cells, fibroblasts, and immune cells including erythrocytes, macrophages, classical, intermediate, and non-classical monocytes, CD4+ and CD8+ T cells, B cells, plasma cells, natural killer cells, mature NK T cells, and neutrophils.

Lung

Includes pulmonary alveolar type 1 and type 2 cells, basal cells, club cells, multiciliated epithelial cells, respiratory tract goblet cells, alveolar adventitial fibroblasts, adventitial cells, capillary, arterial, venous, and lymphatic endothelial cells, bronchial and vascular smooth muscle cells, pericytes, basophils, and immune cells including macrophages, classical, intermediate, and non-classical monocytes, CD4+ and CD8+ T cells, B cells, plasma cells, natural killer cells, mature NK T cells, and neutrophils.

Lymph Node

Includes endothelial cells and immune cells including B cells, CD4+ and CD8+ T cells, naive CD4+ T cells, regulatory T cells, plasma cells, natural killer cells, mature NK T cells, macrophages, classical and intermediate monocytes, myeloid dendritic cells, mast cells, and neutrophils.

Mammary Gland

Includes luminal epithelial cells, progenitor cells of the mammary luminal epithelium, basal cells, fibroblasts, vascular smooth muscle cells, endothelial cells, and immune cells including macrophages, CD4+ and CD8+ T cells, and plasma cells.

Muscle (Skeletal)

Includes fast and slow skeletal muscle cells, satellite stem cells, mesenchymal stem cells, tendon cells, capillary, arterial, and lymphatic endothelial cells, pericytes, smooth muscle cells, and immune cells including erythrocytes, granulocytes, macrophages, neutrophils, CD4+ and CD8+ T cells, and natural killer cells.

Ovary

Includes ovarian surface epithelial cells, stromal cells of the ovary, theca cells, glandular secretory epithelial cells, blood vessel smooth muscle cells, endothelial cells, macrophages, and CD8+ T cells.

Pancreas

Includes pancreatic acinar cells, ductal cells, type B pancreatic cells (beta cells), stellate cells, fibroblasts, endothelial cells, and immune cells including macrophages, classical monocytes, and CD8+ T cells.

Prostate

Includes luminal and basal epithelial cells of the prostate, smooth muscle cells, fibroblasts, endothelial cells, and immune cells including erythrocytes, macrophages, neutrophils, CD4+ and CD8+ T cells, B cells, and mature NK T cells.

Salivary Gland

Includes acinar cells, duct epithelial cells, myoepithelial cells, basal cells, ionocytes, adventitial cells, vascular smooth muscle cells, arterial and lymphatic endothelial cells, fibroblasts, and immune cells including macrophages, tissue-resident macrophages, monocytes, neutrophils, CD4+ and CD8+ T cells, B cells, plasma cells, and natural killer cells.

Skin

Includes fibroblasts, melanocytes, Langerhans cells, sebocytes, smooth muscle cells, endothelial cells, and immune cells including macrophages, mast cells, neutrophils, regulatory T cells, CD4+ and CD8+ T cells, plasma cells.

Small Intestine

Includes enterocytes from the duodenum, jejunum, and ileum, BEST4+ enterocytes, enterocyte of epithelium proper, small intestine goblet cells, Paneth cells, intestinal crypt stem cells, intestinal tuft cells, enteroendocrine cells, enterogial cells, arteriolar and lymphatic endothelial cells, fibroblasts, and immune cells including activated and naive CD4+ and CD8+ T cells, gamma-delta T cells, B cells, plasma cells, mast cells, macrophages, monocytes, and natural killer cells.

Spleen

Includes endothelial cells and immune cells including B cells, CD4+ and CD8+ T cells, regulatory T cells, naive thymus-derived CD4+ and CD8+ T cells, classical, intermediate, and non-classical monocytes, plasma cells, natural killer cells, mature NK T cells, innate lymphoid cells, macrophages, neutrophils, and erythrocytes.

Stomach

Includes epithelial cells, fibroblasts, interstitial cells of Cajal, lymphatic endothelial cells, and immune cells including mononuclear phagocytes, macrophages, tissue-resident macrophages, monocytes, neutrophils, mast cells, regulatory T cells, CD4+ and CD8+ T cells, B cells, plasma cells, natural killer cells, and mature NK T cells.

Testis

Includes male germ cells, spermatocytes, and spermatids.

Thymus

Includes thymocytes, CD4+ and CD8+ thymocytes, naive thymus-derived CD4+ and CD8+ T cells, CD4+ and CD8+ T cells, neuro-medullary and myo-medullary thymic epithelial cells, thymic fibroblasts (type 1 and type 2), mesothelial cells, hematopoietic precursor cells, capillary, arterial, venous, and lymphatic endothelial cells, smooth muscle cells, erythrocytes, and immune cells including macrophages, plasma cells, natural killer cells, B cells, and neutrophils.

Tongue

Includes basal cells, stratified squamous epithelial cells, tongue muscle cells, salivary gland cells, myoepithelial cells, mural cells, fibroblasts, endothelial cells, lymphatic endothelial cells, and immune cells including macrophages, monocytes, mast cells, neutrophils, regulatory T cells, CD4+ and CD8+ T cells, T cells, B cells, and plasma cells.

Trachea

Includes basal cells, multiciliated columnar cells, serous cells, tracheal goblet cells, mucus secreting cells, connective tissue cells, smooth muscle cells, fibroblasts, endothelial cells, and immune cells including macrophages, monocytes, mast cells, neutrophils, CD4+ and CD8+ T cells, B cells, and plasma cells.

Uterus

Includes epithelial cells, ciliated epithelial cells, myometrial cells, myofibroblasts, fibroblasts, vascular smooth muscle cells, pericytes, endothelial cells, and immune cells including macrophages, neutrophils, CD4+ and CD8+ T cells, and mature NK T cells.

Vasculature

Includes Includes capillary, arterial, venous, and lymphatic endothelial cells, endothelial cells, smooth muscle cells, fibroblasts, pericytes, erythrocytes, basophils, and immune cells including macrophages, monocytes, mast cells, neutrophils, CD4+ and CD8+ T cells, B cells, natural killer cells, and mature NK T cells.