

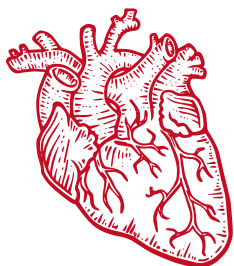
Blood system is a general concept that consists of blood and blood related cells, such as human cardiomyocytes.

AcceGen offers 181 different types of human primary cells associated with the blood system and human blood products for research use.

# Blood System Primary Cells

## Cardiovascular system

Cardiovascular system is an organ system that permits blood to circulate and transport materials (e.g. nutrients, oxygen, carbon dioxide, hormones, and blood cells) to and from the cells in the body to provide nourishment and help in fighting diseases, stabilize temperature and pH, and maintain homeostasis.



**Cardiac cells** and **Vascular cells** are important components of cardiovascular system. As the principal type of the heart, cardiac cells are mainly involved in the contractile function of the heart, pumping blood around the body. Vascular cells are mainly from the inner lining of blood vessels, regulating vascular wall.

## Featured Products

Cat. #	Product Name	Product Type
ABC-TC3533	Human Cardiac Fibroblasts	Cardiac Cells
ABC-TC3371	Human Cord Blood CD34+ Cells, Single	Cord Blood Cells
ABC-TC3843	Human Umbilical Artery Smooth Muscle Cells	Vascular Cells
ABC-TC3844	Human Umbilical Cord Blood Mononuclear Cells	Cord Blood Cells
ABC-TC4046	Human Pulmonary Artery Endothelial Cells	Vascular Cells

## Blood Products

AcceGen human blood products include human whole blood, peripheral blood, plasma, leukopak, serum, red blood cells (erythrocytes), white blood cells (leukocytes), platelets, cord blood cells, and other blood corpuscles.

To know more Human Blood System Primary Cells, please contact us at 1-862-686-2696 or [info@accegen.com](mailto:info@accegen.com); or view the full products list at:

<https://www.accegen.com/category/blood-system-primary-cells/>



## ABC-TC3533 Human Cardiac Fibroblasts (HCFs)

Human Cardiac Fibroblasts (HCFs) are isolated from heart tissue, providing structural support for cardiac myocytes. Cardiac fibroblasts are the permanent cellular constituents of the heart.

Cardiac fibroblast model is excellent to study extracellular matrix producing and remodeling, as well as myocardial responses to injury like wounds, toxicology and pathology. Suitable to establish serum-free human feeder layers for human embryonic stem cell cultures.



### Applications

- Vascular remodeling
- Wound healing
- Scar formation
- Extracellular maintenance
- Synthesis of extracellular matrix
- Growth factors and cytokines



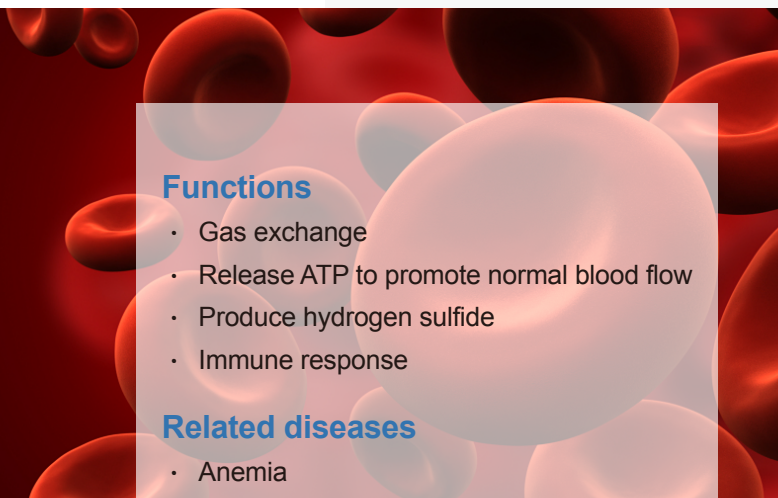
To know more about AcceGen Human Cardiac Fibroblasts, please refer to:  
<https://www.accegen.com/product/human-cardiac-fibroblasts-abc-tc3533/>

### Functions

- Gas exchange
- Release ATP to promote normal blood flow
- Produce hydrogen sulfide
- Immune response

### Related diseases

- Anemia
- Hemolysis
- Polycythemia
- Microangiopathic diseases



## ABC-TC4292 Human PB Red Blood Cells/Mature Erythrocytes

Human Red Blood Cells, also known as red cells or erythrocytes, take up to nearly half of the blood's volume (40% to 45%).

Mature Erythrocytes lose nuclei and organelles during erythroid maturation, therefore they have inability to divide and limited capability to repair as they don't contain DNA and cannot synthesize any RNA. Consequently, no virus can target red blood cells.

To know more about AcceGen Human PB Red Blood Cells/Mature Erythrocytes, please refer to:  
<https://www.accegen.com/product/human-pb-red-blood-cells-mature-erythrocytes-abc-tc4292/>

## ORDER NOW

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