

## Frequencies of Cell Types in Human Peripheral Blood\*

### Cell Frequencies in Peripheral Blood

Cell Type	Frequency ( $\times 10^6$ cells per mL of whole blood)	Percentage	Function
Erythrocytes (Red Blood Cells)	4,200 – 5,900	93% - 96%	Transport oxygen and carbon dioxide throughout the body
Thrombocytes (Platelets)	150 – 400	3% - 6%	Prevent and control bleeding
Leukocytes (white blood cells)	4.2 – 10.9	<1%	Defend the body against infection and disease

### Frequencies of Each Type of Leukocyte

Leukocyte Type	Frequency ( $\times 10^6$ cells per mL of whole blood)	% of Leukocytes	Function
Granulocytes	2.3 – 6.1	45% - 65%	Important mediators of inflammatory response
T Cells	0.6 – 1.8	8% - 25%	Core component of adaptive immune response
B Cells	0.1 – 0.6	3% - 10%	Secrete antibodies as part of humoral immune response
NK Cells	0.1 – 0.4	2% - 5%	Effector cells of innate immunity; respond to infected cells and tumors
Monocytes	0.2 – 0.9	3% - 10%	Surveil for microbial cells and coordinate immune response
Dendritic Cells	<0.1	<1%	Process and present antigen material to T cells
Hematopoietic Stem Cells**	<0.01	<0.1%	Stem cells that form into mature blood cells

(\*) All cell frequencies reflect normal range for healthy adults.

(\*\*) Hematopoietic stem cells give rise to different types of mature blood cells, including leukocytes.