

# 人、小鼠、大鼠常见细胞比例参考值

## 1、人外周血常见细胞参考值：

**Table 1. Human cell frequency in peripheral blood.**

Common Leukocytes		Lymphoid Cells		Myeloid Cells	
Cell type	Percent	Cell type	Percent	Cell type	Percent
T cells	10-25	CD4 <sup>+</sup>	10-20	Neutrophils	40-65
B cells	3-10	CD8 <sup>+</sup>	3-10	Eosinophils	0.1-2
Granulocytes	45-65	Tregs	0.2-1.4	Basophils	0.1-2
Monocytes	3-10	$\gamma\delta$ T cells	1-5	Dendritic cells (DC)	0.5-1
NK cells	2-5	Naïve B cells	0.5-5	Monocyte DCs	0.2-0.4
Dendritic cells (DC)	0.5-1	Memory B cells	0.4-2	Plasmacytoid DCs	0.1-0.2
Stem cells	0.01-0.05	NKT cells	0.01-0.5	Innate lymphoid cells	0.01-0.1

## 2、小鼠脾脏、胸腺、外周血、淋巴结常见细胞参考值：

**Table 2. Murine cell frequency.**

Spleen		Thymus		Peripheral Blood		Lymph Node	
Cell type	Percent	Cell type	Percent	Cell type	Percent	Cell type	Percent
T cells	21-35	CD4 <sup>+</sup>	4-6	T cells	17-20	T cells	65-78
CD4 <sup>+</sup>	13-20	CD8 <sup>+</sup>	1-2	CD4 <sup>+</sup>	8-12	CD4 <sup>+</sup>	35-64
CD8 <sup>+</sup>	7-15	CD4 <sup>+</sup> /8 <sup>+</sup>	85-95	CD8 <sup>+</sup>	7-10	CD8 <sup>+</sup>	19-30
$\gamma\delta$ T cells	0.5-1			B cells	35-58	B cells	9-15
B cells	44-58			Monocytes	2-3	Tregs	2-3
Monocytes	3.5-5			Neutrophils	4-6	Dendritic cells	0.5-1
Granulocytes	1-2			Eosinophils	1-2		
NK cells	1-5			NK cells	4-7		
iNKT	1-2			iNKT cells	0.2-0.5		
Myeloid DC	0.5-2						
Lymphoid DC	0.5-1						
Plasmacytoid DC	0.1-0.3						

### 3、大鼠脾脏、胸腺、外周血常见细胞参考值：

**Table 3. Rat cell frequency.**

Spleen		Thymus		Peripheral Blood	
Cell type	Percent	Cell type	Percent	Cell type	Percent
T cells	31.5-33.5	CD4 <sup>+</sup>	5.7-9.4	T cells	51.5-66.5
CD4 <sup>+</sup>	21.5-26.5	CD8 <sup>+</sup>	2.3-6.9	CD4 <sup>+</sup>	32-40
CD8 <sup>+</sup>	14-18	CD4 <sup>+</sup> /8 <sup>+</sup>	83-87.6	CD8 <sup>+</sup>	18-26
B cells	51-59	CD4 <sup>-</sup> /8 <sup>-</sup>	1.4-2.2	B cells	22.7-40.7
				Monocytes	1-6
				Neutrophils	14-20
				Eosinophils	1-4
				Basophils	Rare
				$\gamma\delta$ T cells	1-2
				NK cells	6-10

说明：

- 1、三张表转自 <https://www.bio-rad-antibodies.com/static/2017/flow/flow-cytometry-cell-frequency.pdf>
- 2、所有细胞比例的分母均为白细胞。
- 3、小鼠和大鼠的品系不同，参考值可能不同，所以仅供一定程度的参考。

## References

[1] 人外周血、小鼠脾脏、小鼠胸腺、小鼠外周血、小鼠淋巴结、大鼠脾脏、大鼠胸腺、大鼠外周血的常见细胞比例: <https://www.bio-rad-antibodies.com/static/2017/flow/flow-cytometry-cell-frequency.pdf>