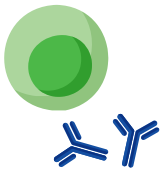
Key Cells in the Immune System

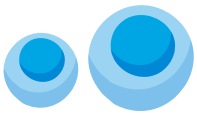
White blood cells are the cells of the immune system that work together to protect the body from pathogens and viruses. They can also cooperate to attack and destroy cancer cells. Here, we briefly describe the unique functions of the white blood cells that have a central role in eliminating cancer.

B cells make antibodies (e.g., against pathogens such as viruses and bacteria) that help the immune system function. Some remain as memory B cells to make the same antibody again later, if needed.



Macrophages eat foreign materials and can either help cancers grow or fight against progressing cancer cells.

CD4+ T cells help manage the immune response. Some remain as memory T cells to fight again later.

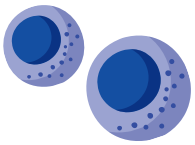


Dendritic cells educate T cells about what kinds of cells they should and should not attack.

CD8+ T cells kill infected, damaged, and cancer cells. Some remain as memory T cells to fight again later.

Mast cells release chemicals against pathogens and stimulate the immune system and can provide factors that aid tumor growth and spread.

Natural killer cells kill infected, damaged, and cancer cells.



Neutrophils, **basophils**, and **eosinophils** release chemicals against pathogens and stimulate the immune system.