

Section:Immune system16

Context: Both B cells and T cells carry receptor molecules that recognize specific targets. T cells recognize a "non-self" target, such as a pathogen, only after antigens (small fragments of the pathogen) have been processed and presented in combination with a "self" receptor called a major histocompatibility complex (MHC) molecule. There are two major subtypes of T cells: the killer T cell and the helper T cell. In addition there are regulatory T cells which have a role in modulating immune response. Killer T cells only recognize antigens coupled to Class I MHC molecules, while helper T cells and regulatory T cells only recognize antigens coupled to Class II MHC molecules. These two mechanisms of antigen presentation reflect the different roles of the two types of T cell. A third, minor subtype are the T cells that recognize intact antigens that are not bound to MHC receptors. CANNOTANSWER

STUDENT: **What are the two major subtypes of T cells?**

TEACHER: ↪ "" (killer T cell and the helper T cell)

STUDENT: **What kind of T cells have the purpose of modulating the immune response?**

TEACHER: ↪ "" (regulatory T cells)

STUDENT: **Killer T cells can only recognize antigens coupled to what kind of molecules?**

TEACHER: ↪ "" (Class I MHC molecules)

STUDENT: **Helper and regulatory T cells can only recognize antigens coupled to what kind of molecules?**

TEACHER: ↪ "" (Class II MHC molecules)

STUDENT: **What class of T cells recognizes intact antigens that are not associated with MHC receptors?**

TEACHER: ↪ "" (T cells)

STUDENT: **What cells do not carry receptor molecules?**

TEACHER: ↪ "" (CANNOTANSWER)

STUDENT: **What do T cells recognize before antigens have been processed?**

TEACHER: ↪ "" (CANNOTANSWER)

STUDENT: **How many subtypes of B cells exist?**

TEACHER: ↪ "" (CANNOTANSWER)

STUDENT: **How many roles do the types of B cell have?**

TEACHER: ↪ "" (CANNOTANSWER)

STUDENT: **What do killer B cells recognize?**

TEACHER: ↪ "" (CANNOTANSWER)