

PATHOGEN = DISEASE-CAUSING ORGANISM

e.g. BACTERIUM, VIRUS, FUNGUS



ANTIGEN = CHEMICAL MARKER
ON THE OUTSIDE OF A CELL

NON-SELF ANTIGENS = ANTIGENS PRESENT
ON PATHOGENS THAT TRIGGERS BODY'S
IMMUNE RESPONSE

SELF ANTIGENS = ANTIGENS PRESENT ON OUR
OWN BODY CELLS - DO NOT TRIGGER IMMUNE
RESPONSE



(RED BLOOD)
CELL

SPECIAL RECEPTOR
SITES



ANTIBODIES = SPECIAL PROTEIN
PRODUCED BY PLASMA CELLS
THAT BIND TO NON-SELF
ANTIGENS, INACTIVATING IT



ANTIGEN-ANTIBODY
COMPLEX =
SPECIFIC ANTIBODY COMBINES
WITH SPECIFIC ANTIGEN

* IMMUNITY THAT PRODUCES FREE ANTIBODIES THAT
CIRCULATE AROUND BODY & ATTACK PATHOGENS BEFORE
THEY GET INTO CELLS

* CELLS THAT PRODUCE ANTIBODIES ARE B CELLS

↳ TYPE OF WBC CALLED A LYMPHOCYTE

* B CELLS MADE IN BONE MARROW → MATURE IN
BONE MARROW

* PATHOGENS ∴ CANNOT ENTER CELLS

* TAGGED VIRUS (WITH ANTIBODIES) DESTROYED - PHAGOCYTOSIS

* CIRCULATE IN LYMPHATIC TISSUE VIA BLOOD.

IMMUNITY
PART 1

ANTIBODY-MEDIATED

RESPONSE (HUMORAL)

RESPONSE

CELL-MEDIATED

* IMMUNITY THAT DESTROYS PATHOGENS WHEN THEY GET
INSIDE THE CELL

* ANTIBODIES ARE ATTACHED TO CELLS

* PRODUCTION OF CELLS CALLED T (LYMPHOCYTES) CELLS

↳ PRODUCED IN BONE MARROW

↳ MATURE IN THYMUS

* CIRCULATE IN LYMPHATIC TISSUE FROM BLOOD