ABO Blood Group

The ABO blood group is based on the presence (or absence) of two major antigens on red blood cell membranes—antigen A and antigen B. A person’s erythrocytes have one of four antigen combinations: only A, only B, both A and B, or neither A nor B. An individual with only antigen A has type A blood; a person with only antigen B has type B blood; one with both antigen A and antigen B has type AB blood; and one with neither antigen A nor antigen B has type O blood.

ABO blood group antibodies are synthesized in the plasma about two to eight months following birth. The stimulus for their synthesis has not clearly been established; but whenever antigen A is absent in the red blood...