

Human Blood Cell Typing

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Our organisms manufacture antibodies automatically to many molecules, proteins, and microorganisms. Among others, when foreign red-cell surface glycoproteins (antigens) are in the bloodstream they stimulate the immune system to manufacture antibodies against them. These antibodies (antibodies) are proteins that bind to the antigens and cause them to be removed from the body. The antibodies are called **anti** (against) because they bind to antigens that are **foreign** (not self).

Model 1 – Red Blood Cells and Antibodies

	Person with Blood Type A	Person with Blood Type B	Person with Blood Type AB	Person with Blood Type O
Cells with surface antigens				
Antibodies present			—	
Cells in the presence of anti-A antibodies				
Cells in the presence of anti-B antibodies				

1. Blood types in the human population are characterized by their presence or absence of **antigens** on their surfaces and their **anti** (against) antibodies.

a. How many of Model 1's body types blood types are found in the human population?

b. Which blood is used in Model 1 to represent anti-A antibodies?

c. What relationship is type A with blood and how is type B and blood type?

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SJ Ball



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