

Chapter 19
Web Text Box 1

Using antibodies to identify disease

The human immune system generates large amounts of antibody against even small numbers of invading pathogens. Thus the first step in investigating what is making a patient ill is often to see what antibodies their B cells are producing. If their blood contains antibodies against a particular pathogen, then they have been infected with it. For example this is the basis of all routine tests for HIV infection. However, the presence or absence of antibodies can be misleading. A person who has just been infected with a pathogen may not yet have generated significant amounts of antibody against it, while the presence of antibody may indicate only that the person had the disease many years ago, or has been immunized against it.