

## KEY FACTS

- Non-specific: skin, mucus, cilia, stomach acid, phagocytosis
- Specific: lymphocytes → antibodies complementary to specific antigens
- Memory cells → rapid response on re-exposure → immunity
- Vaccine: harmless antigen → antibodies + memory cells
- ★ Monoclonal antibodies: hybridoma cells → specific antibodies → cancer treatment

## KEY TERMS

Antigen	Protein on pathogen surface
Antibody	Specific protein from lymphocytes binding one antigen
Memory cell	Long-lived lymphocyte — enables rapid response
Hybridoma	B cell + tumour cell → produces monoclonal antibodies

■ EXAM TIP: Memory CELLS provide immunity (not antibodies). Monoclonal Ab = hybridoma cells. Used in pregnancy tests and cancer treatment.