

How Antibiotics Work

Biology

The main targets, and why each is selective.

Mechanism by class.

Class	Targets
Penicillins, cephalosporins	Cell wall synthesis
Tetracyclines, macrolides	70S ribosome — protein synthesis
Aminoglycosides	30S ribosomal subunit
Fluoroquinolones	DNA gyrase
Rifampicin	Bacterial RNA polymerase
Sulfonamides	Folate synthesis

Bactericidal kills; bacteriostatic stops division and lets the immune system finish. The distinction matters in immunocompromised patients.