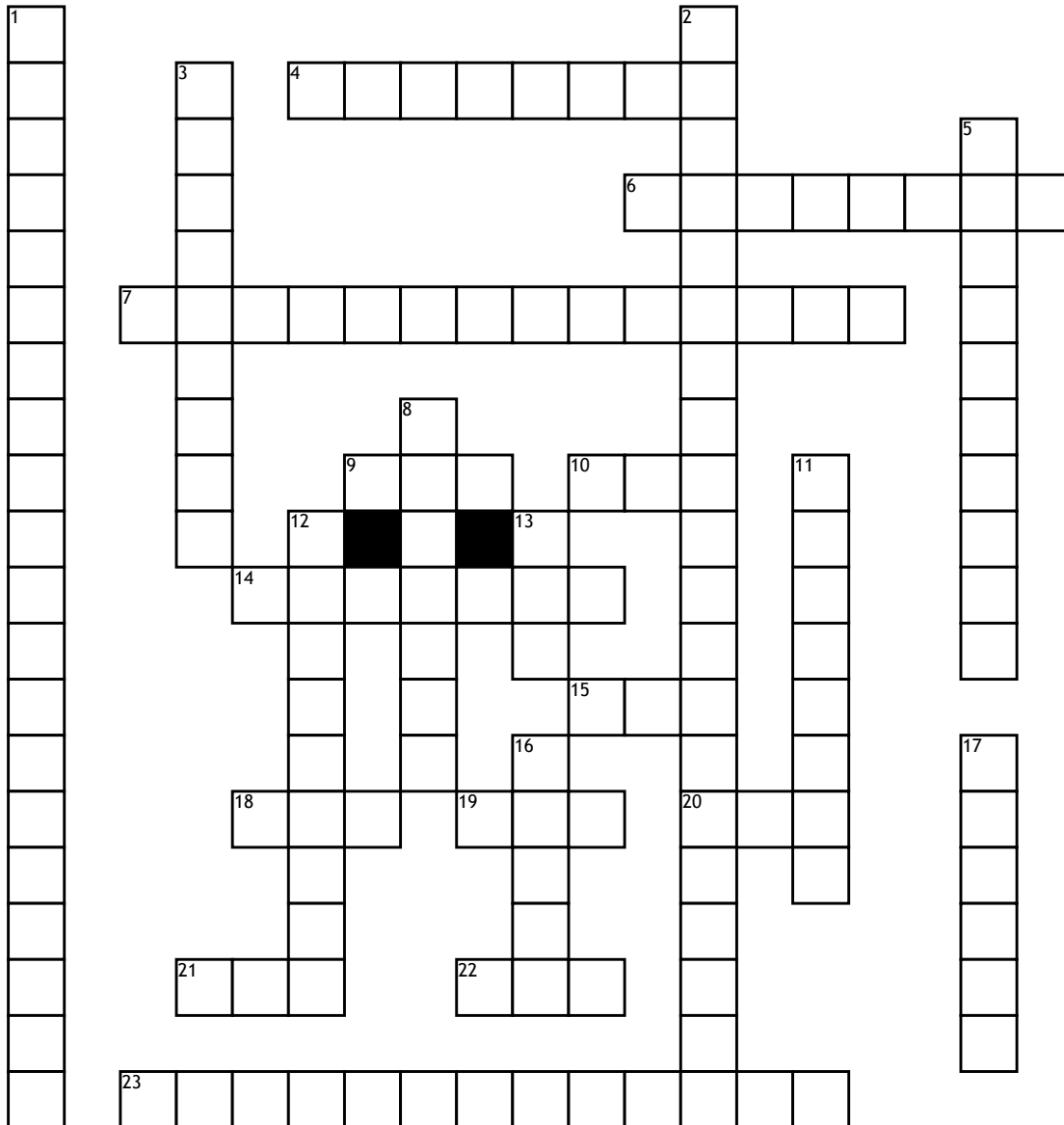


# Immunology



## Across

4. Cleaves bonds in peptidoglycan (8)  
 6. Protein found in granules of CD8 T cells (8)  
 7. Time it takes for antibodies against HIV to be detectable in an infected individual (14)  
 9. Express MHC II (3)  
 10. Immunoglobulin DNA variability hotspots (3)  
 14. An inactive enzyme precursor. (7)  
 15. Forms in bacterial lipid membrane from polymerised C9 monomers. (3)

18. Co-receptor on anti-viral T cells (3)  
 19. Old name for CXCL8 (3)  
 20. Mediates hypersensitivity type I reactions (3)  
 21. Dimeric immunoglobulin that provides mucosal protection (3)  
 22. Transports intracellularly derived peptides into ER (3)  
 23. Phagocytic cell that presents antigen to Naïve T cells. (9,4)

## Down

1. Process that improves Ig affinity for antigen (7,13)  
 2. Essential HIV enzyme that produces cDNA from viral RNA (7,13)

3. A filamentous oral pathogen. F. ? (9)  
 5. Keystone pathogen in periodontitis P. ? (10)  
 8. Binds to micro-organisms enhancing their phagocytosis (7)  
 11. Causes pathology. (8)  
 12. Cell line that produces monoclonal antibody (9)  
 13. Number of antigen binding sites on a polymeric form of IgM (3)  
 16. Method used to detect pathogenic component or antibodies in a clinical sample (5)  
 17. The basis of vaccination, the result of an effective adaptive response (6)