

8. Lymphocyte Activation

1 unit, Morgan Huse, February 11, 2026

- 1) Antigen recognition by the TCR.
- 2) Biophysical analysis of TCR-pMHC interactions.
- 3) TCR complex structure and activation.
- 4) Signaling 1: Early complexes.
- 5) Signaling 2: Signaling to the nucleus.
- 6) The immunological synapse.

Discussion Paper:

Su X, Ditlev J, Hui E, et al., Phase Separation of Signaling Molecules Promotes T Cell Receptor Signal Transduction. Science, 2016, 352, 595-599

Required Review.

Comrie W, Babich A, Burkhardt J. F-actin flow drives affinity maturation and spatial organization of LFA-1 at the immunological synapse. Journal Cell Bio, 2015