

FIGURE 26.3 Antigen processing and presentation by a DC that is highly activated. DCs can be activated by a number of naturally occurring agents, such as a TLR agonist. TLR agonists are components of viruses and bacteria. The result is a highly activated $CD8^+$ T cell.

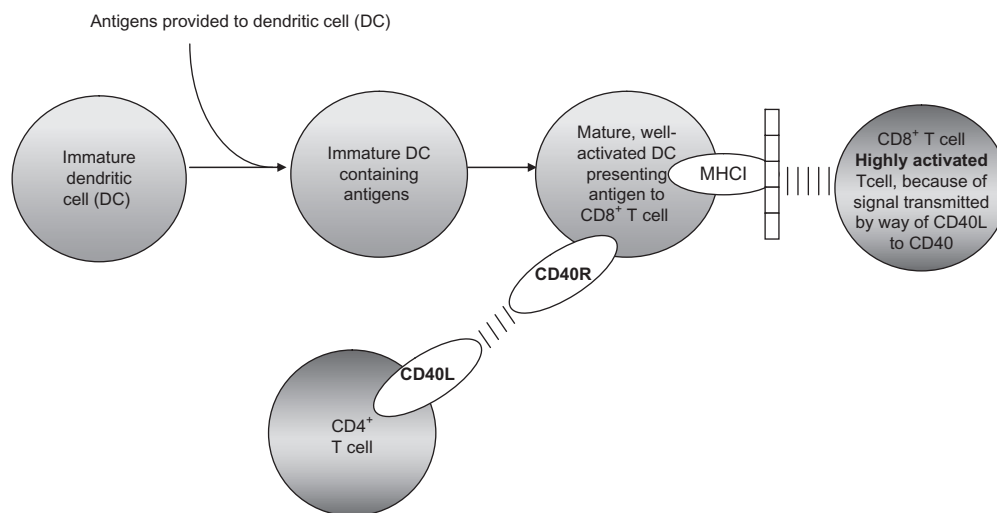


FIGURE 26.4 Antigen processing and presentation by a DC that is highly activated. DCs can be activated by a number of naturally occurring agents, such as a CD40 ligand. The DC is activated by a $CD4^+$ T cell, where this activation involves contact of CD40 ligand of the $CD4^+$ T cell with CD40 receptor of the DC. The end-result, after formation of the immune synapse, is a highly activated $CD8^+$ T cell.

the following bullet points. A few token examples are then disclosed.

- Vaccines,
- Cytokines,
- TLR agonists,
- Inhibitors of Tregs.

b. Vaccines

Vaccines have the longest history of use of all of the immune-modulating drugs (87). Edward Jenner is the scientist most associated with the invention of vaccination. Jenner's vaccination of

⁸⁷Plotkin SA, editor. History of vaccine development. New York: Springer, Inc.; 2011.