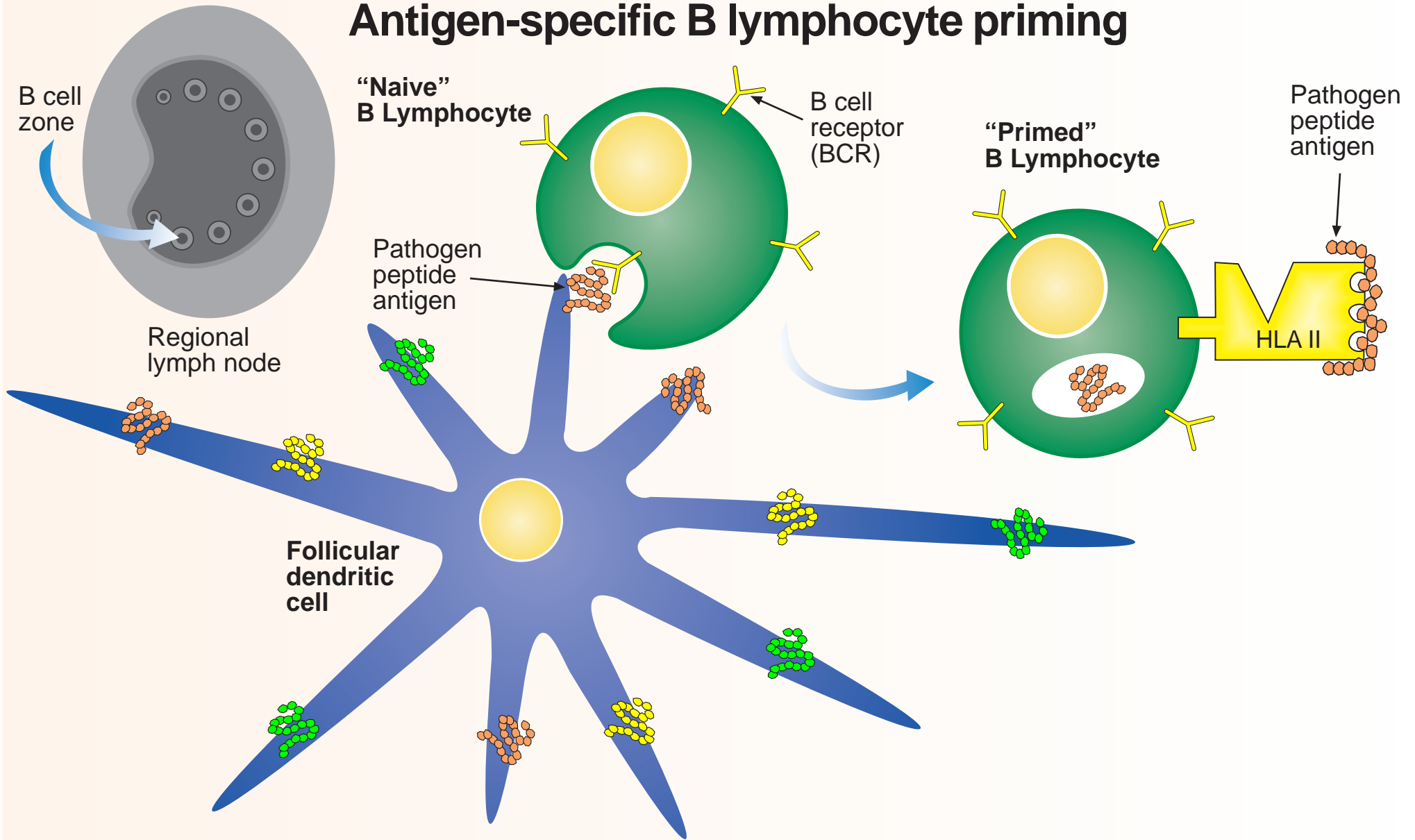


Antigen-specific B lymphocyte priming



A normal antibody response to a pathogen that triggers an autoimmune reaction in dermatomyositis is first initiated by follicular dendritic cells in the B cell zone of the regional lymph node. These cells trap pathogen-derived antigens on their surface and present them to naive B cells. B cells that recognise protein antigens with their B cell receptors (BCR) endocytose them and present peptide antigens on surface HLA class II receptors to CD4⁺ helper T lymphocytes in the T cell zone of regional lymph nodes. The primed B cell then requires activation signals from a previously activated CD4⁺ helper T lymphocyte that recognises a peptide from the same antigen.

