

NF- κ B is a critical signaling molecule in the immune system that regulates cell survival and cell death, lymphocyte responses, and inflammation. Acting as a transcription factor that can receive several inputs, it coordinates distinct gene expression programs in response to a wide variety of stimuli. Written and edited by experts in the field, this collection from Cold Spring Harbor Perspectives in Biology includes contributions covering the structure of NF- κ B, its DNA-binding activity and specificity, the role of the inhibitor I- κ B, and canonical and alternative mechanisms of NF- κ B activation. The contributors examine the physiological role of NF- κ B in immune cells, as well as its functions in other tissues, such as the nervous system. They also discuss work indicating that NF- κ B represents a critical link between inflammation and cancer. Including clinical perspectives on the use of NF- κ B inhibitors in cancer therapy and a historical introduction by David Baltimore, in whose lab NF- κ B was discovered, this volume is a vital reference for cell and molecular biologists, immunologists, and pathologists interested in regulation of cell function.

About the Author Edited by Michael Karin, University of California, San Diego, and Louis M. Staudt, National Cancer Institute