CELL BIOLOGY/BIOMEDICINE

SIGNAL Transduction Second Edition

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A reference on cellular-signalling processes, Signal Transduction second edition details the sources, key observations, and experiments that set the scene for recent and current scientific endeavour. Beginning with a historical overview, this book discusses how the concept of chemical messengers arose in the early twentieth century and shaped our current understanding of the action of hormones, cytokines, neurotransmitters, and growth factors.

Signal Transduction second edition further examines more complex signalling cascades, emanating from classic receptors, as well as adhesion molecules, involved in processes such as vision, smell, inflammation, innate and adaptive immunity, glucose homeostasis, cell-fate decisions, cell differentiation, and cell transformation. This timely revision concludes with a discourse on the targetting of signal-transduction cascades in the treatment of cancer and the structure of protein domains key to the assembly of signalling complexes.

Key Features:

- In-depth insight into a subject central to cell biology and fundamental to biomedicine, including drug development
- Extensive conceptual colour artwork to assist with comprehension of key topics
- Special emphasis on how molecular (domain) structure determines protein function
- Comprehensive referencing of both core and historical literature
- Guided access and inclusion of Protein Data Bank and Swiss-Prot accession codes and URLs

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