PATHWAYSIN HUMAN CANCER

Revised Edition

The Pathways in Human Cancer poster summarizes some of the key signaling pathways implicated in tumorigenesis and tumor progression in humans. Within each pathway, gene products known to be mutated in human tumors—oncogenes and tumor suppressor genes—are coded with information on types of genetic alterations and conferred capabilities to the tumor. Proteins are shown using structural representatives. New to this revised poster edition are signaling pathways for Hippo Signaling, Autophagy, Warburg Effect, and Epigenetic Regulation.

This poster was created by scientists at Cell Signaling Technology in collaboration with Robert A. Weinberg and others at the forefront of cancer research. Expanded versions of each pathway, including additional downstream signaling nodes, can be found at

oncogene tumor suppressor mut Type of genetic alteration Type of conferred capability

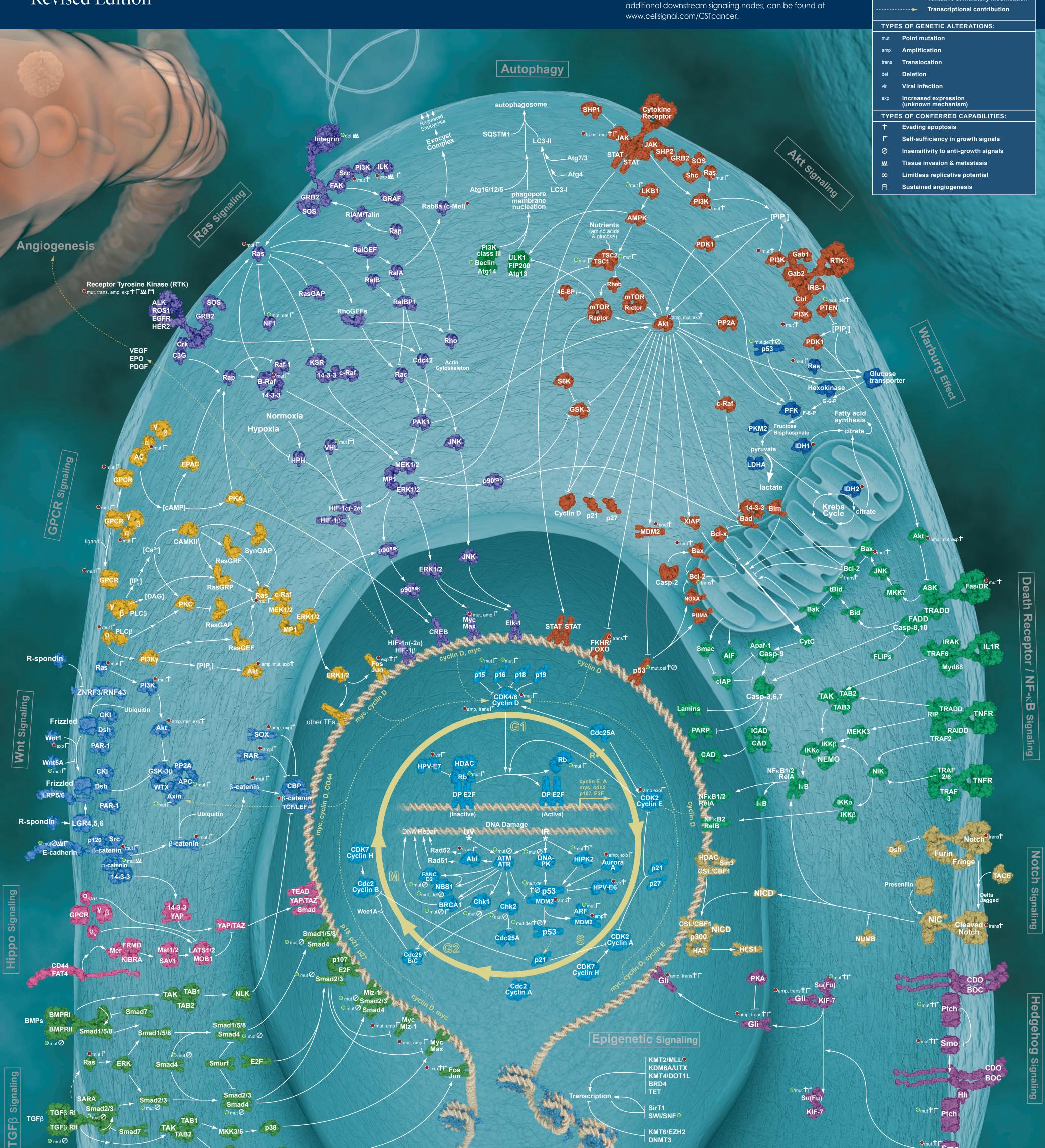
- **Direct stimulatory modification**
- **Direct inhibitory modification**

Multistep stimulatory modification

Ras Common protein name

Structural representative

Transcriptional contribution





● mut Ø

Scienstists at Cell Signaling Technology collaborate with key opinion leaders in cancer research to create reference pathway diagrams that reflect the latest thinking in the research community. Over 40 pathway diagrams currently exist, including the pathways represented here and many others.

www.cellsignal.com/CSTcancer

Cell Signaling Technology would like to thank digizyme for their collaboration on the design and concept of this poster. Please visit www.digizyme.com to see more of their work.

Types of the state of the state



KMT6/EZH2 DNMT3

