

Signalling Pathway

A signalling pathway is a sequence of steps involving several molecules in a cell or at its surface (receptors) that work together to control cell functions.

Signalling pathways are important in controlling many functions such as cell division, cell death, and the switching on or off of certain genes. They are directly linked to the cell's response. After the first molecule in a pathway receives a signal, it activates another molecule. This process is repeated until the last molecule is activated and the cell function is carried out. Abnormal activation or disruption of signalling pathways can lead to a variety of cell dysfunctions, among them cancer. Some cancer medicines have been developed to target these effects.