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Gene Regulation

National Human Genome Research Institute (NHGRI)

Source

National Human Genome Research Institute (NHGRI). [Gene Regulation](#).

Gene regulation is the process of turning genes on and off. During early development, cells begin to take on specific functions. Gene regulation ensures that the appropriate genes are expressed at the proper times. Gene regulation can also help an organism respond to its environment. Gene regulation is accomplished by a variety of mechanisms including chemically modifying genes and using regulatory proteins to turn genes on or off.