

# Transcriptome

To produce proteins, genes are first 'transcribed' into messenger RNA (mRNA). The transcriptome represents the whole set of mRNA molecules present in a specific cell or tissue at a certain time. By analysing the transcriptome, researchers can determine when each gene is turned on or off in a cell or tissue, how that type of cell normally functions, and how changes in the normal level of gene activity may be altered by or contribute to disease.