

Relationship between RNA, DNA, and Proteins

RNA, not DNA, is the original heredity molecule. RNA is not a mere intermediary or messenger molecule in the flow of genetic information to proteins. Life began as ribonucleoprotein systems establishing a direct relationship between RNA and proteins. DNA appeared as an improved storage and safeguarding form of the heredity molecule over RNA with the emergence of prokaryotes.

DNA → RNA → Proteins

Figure: Francis Crick's "central dogma of molecular biology."



Figure: DNA as a storage and safeguarding form of heredity.